PATTERN AND CLINICAL CORRELATION OF SARCOPENIA IN PATIENTS WITH FATTY LIVER

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I hereby declare that the thesis entitled **"PATTERN AND CLINICAL CORRELATION OF SARCOPENIA IN PATIENTS WITH FATTY LIVER"** submitted towards partial fulfillment of the requirements for the award of **MD IN GENERAL MEDICINE** degree to BFUHS is a compilation of original work carried out by me under the supervision of **Dr. Vandana Midha,** Professor, Department of Medicine & **Dr. Parminder Singh**, Professor & Head, Department of Endocrinology. No part of this thesis has formed the basis for the award of any degree previously.

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Dedicated

to

my Family

&

Teachers

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Dr. Ankur Goyal...

LIST OF ABBREVIATIONS

ALD	Alcoholic Liver Disease
ALT	Alanine Transaminase
APRI	Aspartate Aminotransferase to Platelet Ratio Index
ASM	Appendicular Skeletal Muscle mass
AST	Aspartate Transaminase
AWGS	Asian Working Group for Sarcopenia
BARD	BMI, Aspartate Transaminase / Alanine Transaminase ratio, Diabetes Mellitus
BIA	Bioelectrical Impedance Analysis
BMI	Body Mass Index
CAD	Coronary Artery Disease
CRP	C-Reactive Protein
CT	Computed Tomography
DM	Diabetes Mellitus
DXA/DEXA	Dual-Energy X-ray Absorptiometry
ESLD	End-Stage Liver Disease
EWGSOP	European Working Group on Sarcopenia in Older People
FIB-4	Fibrosis- 4 score
FM%	Fat Mass Percentage
FNIH	Foundation for the National Institutes of Health
HCV	Hepatitis C Virus
HGS	Hand Grip Strength
HHD	Hand-Held Dynamometer
HOMA-IR	Homeostasis Model Assessment estimated Insulin Resistance
HSI	Hepatic Steatosis Index
IFG	Impaired Fasting Glucose
IGT	Impaired Glucose Tolerance
KNHANES	Korean National Health and Nutrition Examination

	Surveys
LAI	Liver Attenuation Index
MAC	Mid Arm Circumference
MRI	Magnetic Resonance Imaging
MSRA	Mini Sarcopenia Risk Assessment questionnaire
NAFLD	Non- Alcoholic Fatty Liver Disease
NASH	Non-Alcoholic Steato- Hepatitis
NGT	Normal Glucose Tolerance
SAGE	Study on Global Ageing and Adult Heath
SARC-F	Strength, Assistance in walking, Rise from a chair, Climbing stairs, and Falls
Sarco-CUBES	Sarcopenia-Chandigarh Urban Bone Epidemiological Study
SCPT	Stair Climb Power Test
SMI	Skeletal Muscle Mass Index
SO	Sarcopenic Obesity
SPPB	Short Physical Performance Battery test
SPSM	Short Portable Sarcopenia Measure
TGUG	Timed Get Up-and-Go test
TNF-α	Tumour Necrosis Factor-α
US	Ultrasonography
VLDL	Very Low-Density Lipoprotein
WC	Waist Circumference

ABSTRACT

Introduction: Sarcopenia refers to the syndrome of a progressive and generalized loss of skeletal muscle mass, strength, and function, which in turn is associated with an increased risk of adverse outcomes, such as physical disability, poor quality of life, and increased mortality. Sarcopenia and hepatic steatosis share similar pathological mediators, such as chronic inflammation, insulin resistance, and physical inactivity. There is a scarcity of data and research in North India pertaining to the prevalence of sarcopenia in patients with fatty liver, so in the present study, we aim to determine the prevalence and clinical correlation of sarcopenia in fatty liver patients.

Aims and objectives: To study the pattern and clinical correlation of sarcopenia in patients with fatty liver.

Material and methods: A cross-sectional study that included 200 patients with fatty liver on ultrasonography from the Department of Medicine and Endocrinology, Dayanand Medical College, Ludhiana. The questionnaire was assessing demographics, comorbidities, general and systemic examination, anthropometry, laboratory investigations, hepatic indices, and sarcopenic assessment including SARC-F (screening tool), Skeletal Muscle Mass Index (for skeletal muscle mass), Hand Grip Strength (for skeletal muscle strength) and Short Physical Performance Battery test (for skeletal muscle performance/ function)

Results: A total of 200 patients with fatty liver were recruited out of which 120 (60%) were males and 80 (40%) were females with a mean age of 51.46 ± 16.78 years. Only 8.5% had a history of alcohol consumption. The mean BMI of the cohort was 26.21 ± 5.42 kg/m^2 which is obese as per the Asian classification of BMI. A significant association was found between increasing age and sarcopenic parameters. The female gender had a significant association (p-value- 0.001, n=51, 59.3%) with low SPPB. Low Hand Grip Strength had a significant association with low BMI, (p-value- 0.002, n=26, 43.3%) low waist circumference (p-value- 0.003, n=40, 66.7%), and low mid-arm circumference. (p-value- 0.017, n=48, 80%). However, there was no significant association between the severity of the grade of fatty liver and sarcopenic parameters.

Conclusion: Our study demonstrated that sarcopenia in liver disease is a common condition in northern India though it is underdiagnosed in clinical practice. Sarcopenia assessment is a multifactorial process with no simple and easy-to-administer universal criteria or definition for early and accurate diagnosis. The key determinants of sarcopenia are increasing age, Body Mass Index (BMI), central obesity, metabolic disorders, and other comorbid conditions. Sarcopenia is one of the risk factors for the progression of liver disease and thus causes an increase in morbidity and mortality. So, in order to improve the quality of life of the sarcopenic patient, early diagnosis followed by adequate intervention is essential.

Keywords: Fatty Liver, Sarcopenia, Skeletal muscle mass, strength, and performance

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INTRODUCTION

FATTY LIVER

DEFINITION

Fatty liver, also known as hepatic steatosis, is defined as excessive accumulation of triacylglycerols-rich macrovesicular and/or microvesicular lipid droplets within the hepatocytes. It occurs when hepatic mechanisms for triglyceride synthesis (lipid uptake and de novo lipogenesis) overwhelm the mechanisms for triglyceride disposal (degradative metabolism and lipoprotein export). The presence of > 5% steatotic hepatocytes in a liver tissue section is the minimum criterion for the histological diagnosis of hepatic steatosis. [1]

ETIOLOGY

The most common causes of fatty liver are alcoholic liver disease (ALD) and non-alcoholic fatty liver disease (NAFLD). Other causes of hepatic steatosis include drugs e.g. methotrexate, amiodarone, estrogen, glucocorticoids, tamoxifen, etc, hepatitis C (particularly genotype 3), acute fatty liver of pregnancy, and multiple inborn errors of metabolism.

EPIDEMIOLOGY

The prevalence of both ALD and NAFLD is increasing worldwide. [2,3] In concordance with the global epidemic of obesity and type 2 diabetes mellitus, nonalcoholic fatty liver disease (NAFLD) has become the most common liver disease with a worldwide prevalence of 25%.[4] Its prevalence is highest in the Middle East (31%) and South America (32%) and lowest in Africa (14%).

DIAGNOSIS

The gold standard for diagnosis of hepatic steatosis is percutaneous liver biopsy. But being an invasive procedure, with the possibility of uninformative sampling and due to the risk of complications, it is less commonly advocated. The more frequently used modalities are non-invasive hepatic markers and radiological parameters.

Non-invasive hepatic markers include investigations like bilirubin (total, direct, and indirect), transaminases, alkaline phosphatase, gamma-glutamyl transferase, albumin, prothrombin time, etc. Multiple indices

have been devised using routine laboratory investigations and anthropometric measurements like hepatic steatosis index (HSI), APRI Score (Aspartate aminotransferase to platelet ratio index), FIB-4 score, BARD score, and NAFLD score. These indices have been used to differentiate hepatic steatosis and fibrotic stage.

The radiological modalities available are ultrasonography, computed tomography (CT), magnetic resonance imaging (MRI), and transient elastography. Ultrasound is the most commonly used radiological investigation for fatty liver as it is readily available, cost-effective, and radiation-free. Fatty liver disease is graded from grade 1 to 3 based on the echogenicity of liver parenchyma in comparison to the renal cortex and spleen.

SARCOPENIA

DEFINITION

Sarcopenia refers to a progressive, generalized loss of skeletal muscle mass, strength, and function, which is associated with an increased risk of adverse outcomes, such as physical disability, poor quality of life, and increased mortality. [5]

In 1989, Rosenberg introduced the term “sarcopenia” which was used to refer to age-related loss of skeletal muscle mass and volume. [6] but later it was found to be a multifactorial disorder associated with increasing age, hormonal changes, dietary factors, neurodegenerative change, etc. The definition and diagnostic criteria of sarcopenia are still evolving as new findings challenge the understanding of the topic. The European Working Group on Sarcopenia in Older People (EWGSOP)[7] developed a practical clinical definition in 2010 according to which the diagnosis of sarcopenia requires documentation of low muscle mass and low muscle function (either low muscle strength or low muscle performance).

In 2018, revised EWGSOP [5] guidelines were published with a major amendment that muscle strength comes to the forefront, as it was recognized that muscle strength is better than muscle mass in predicting adverse outcomes. The staging system for sarcopenia by EWGSOP 2018:

- Probable sarcopenia- decreased muscle strength but have no impact on muscle mass or performance.
- Sarcopenia- decreased muscle strength and mass
- Severe sarcopenia- decreased muscle strength with decreased muscle mass and performance[5]

Asian Working Group for Sarcopenia[8] 2019 published a consensus on the definition of sarcopenia.

- Possible sarcopenia: low muscle strength or low physical performance
- Sarcopenia: Low muscle mass + low muscle strength or Low physical performance
- Severe sarcopenia: Low muscle mass + low muscle strength and Low physical performance

EPIDEMIOLOGY

The worldwide prevalence of sarcopenia is 10% in men and 10% in women. The prevalence was higher among non-Asian than among Asian individuals in both genders. [9] The prevalence of sarcopenia in the Indian population was found to be 17.5%. [10]

DIAGNOSIS

Screening of Sarcopenia: The initial assessment of sarcopenia can be done by the screening tool SARC-F scoring system which is a simple questionnaire which high specificity and positive predictive value for sarcopenia. It includes Strength, Assistance in walking, Rise from a chair, Climbing stairs, and Falls. Other screening tests include Calf Circumference, Mini Sarcopenia Risk Assessment (MSRA) questionnaire, Short Portable Sarcopenia Measure (SPSM), Ishii screening tool, and finger circle test. [11]

Skeletal muscle mass: It can be measured by magnetic resonance imaging, computed tomography, dual-energy X-ray absorptiometry (DXA), and bioelectrical impedance analysis (BIA). Some studies also report ultrasonographic assessment of lower leg muscle as a modality to measure muscle mass. [12] A cost-effective replacement for these

radiological modalities is anthropometry. Multiple formulas have been formulated for the assessment of muscle mass.

Skeletal muscle strength: measuring hand grip strength using a dynamometer is the most commonly used method. An alternative to this is the chair stand test in which the time taken by the patient to sit and stand on a chair 5 times is calculated. When the assessment of hand grip strength is difficult due to dysfunction of hand muscle e.g. cerebrovascular accident, advanced arthritis, etc. isometric torque techniques can be used for measuring lower limb strength. [13]

Skeletal muscle performance: It is evaluated by the Stair Climb Power Test (SCPT), Timed Get Up-and-Go (TGUG) test, and the Short Physical Performance Battery (SPPB).

- The SCPT is a simple test in which the patient is asked to climb a flight of stairs. [14]
- The TGUG measures a patient's muscle performance by speed. In this test, the time needed to rise from a seated position and walk 3 m away and back to a seated position is measured.
- The SPPB measures lower extremity function by assessing a patient's walking gait, balance, and chair stand.

SARCOPENIA AND FATTY LIVER

Sarcopenia and hepatic steatosis share similar pathological mediators, such as insulin resistance, chronic inflammation, physical inactivity, obesity, vitamin D deficiency, and multiple cytokines. Both hepatocytes and myocytes are primary target organs for insulin action, and insulin resistance is a well-known risk factor in the pathophysiology of both NAFLD and sarcopenia. Insulin plays a key role in protein anabolism and lipogenesis. In insulin resistant state, there occurs a reduction in protein synthesis and an increase in protein catabolism in the myocytes resulting in muscle mass loss. Insulin resistance in adipose tissue drives lipolysis, free fatty acid release, and promotes a pro-inflammatory environment

known as lipotoxicity. Further, lipotoxicity drives excess lipid accumulation in both the liver and the muscle.

Recently, multiple studies have documented the relationship between sarcopenia and hepatic steatosis. Studies have also shown a higher risk of progression of hepatic steatosis and fibrosis in the sarcopenic patient. The earliest evidence of a link between sarcopenia and NAFLD came from the Korean Sarcopenic Obesity Study.[15] Hence, we conducted this study to study the pattern and correlation of sarcopenia in fatty liver patients.

AIMS AND OBJECTIVES

- To determine the pattern of sarcopenia in patients with fatty liver.
- To determine the clinical correlation between sarcopenia and patients with fatty liver.

REVIEW OF LITERATURE

FATTY LIVER

Fatty liver or hepatic steatosis is the abnormal accumulation of excessive triglycerides in the hepatic parenchymal cells. Adipose tissue is now recognized not simply as a storage depot for excess energy, but rather as an active endocrine organ that secretes several molecules called adipocytokines. A number of these adipocytokines have been linked to alterations in insulin sensitivity, including adiponectin, leptin, resistin, and tumor necrosis factor-α (TNF-α)[16]

The presence of > 5% hepatocytes with triglycerides in a liver tissue section is considered the minimum criterion for the histological diagnosis of hepatic steatosis.[1]

ETIOLOGY

Hepatic steatosis is caused by the accumulation of fatty acid within the hepatocytes, either from the circulation or by de novo synthesis within the liver, exceeding the capacity of the liver to metabolize the fat by β-oxidation or secrete it as very low-density lipoproteins (VLDL). Derangements in any of these pathways alone or in combination cause the fatty acid to accumulate in the liver. Excessive accumulation of triglycerides in hepatocytes causes oxidative stress which can activate the stellate cells and lead to the inflammation and production of collagen. The two most common causes of hepatic steatosis are alcoholic liver disease (ALD) and non-alcoholic fatty liver disease (NAFLD). NAFLD is associated with metabolic Syndrome (X-syndrome) which is a cluster of disorders including central obesity, insulin resistance with or without type 2 Diabetes Mellitus, dyslipidemia, and hypertension.

Other etiological factors of fatty liver include:

- Viral etiology like HCV genotype 3
- Drugs e.g. tamoxifen, amiodarone, methotrexate, corticosteroids
- Metabolic abnormalities e.g., glycogen storage disorders, homocystinuria
- Nutritional status e.g., total parenteral nutrition, severe malnutrition, overnutrition, or a starvation diet

EPIDEMIOLOGY

GLOBAL EPIDEMIOLOGY

Fatty liver is one of the most common causes of liver disease in the world. The burden of both ALD and NAFLD is increasing worldwide. [2,3] In the Dionysos Nutrition and Liver Study, 45% of individuals were found to have fatty liver on radiological examination by ultrasonography[17]. Out of this, 25% of patients were found to have NAFLD and 20% had alcoholic fatty liver disease. The incidence of ultrasound-determined fatty liver in the Dionysos Study was found to be 2 per 1000 person-years. [18]

Nonalcoholic fatty liver disease (NAFLD) is the most common liver disease globally with a worldwide prevalence of 25%. [4] Younossi ZM, et al [4] conducted a meta-analysis including 86 studies with a sample size of 8,515,431 patients from 22 countries. The global prevalence of NAFLD was found to be 25.24% with the highest prevalence in the Middle East (31%) and South America (32%) and the lowest in Africa (14%). A high prevalence of NAFLD was also found in the Asian population (27%). The NAFLD incidence rate for Asia was found to be 52.34 per 1,000 person-years. The metabolic co-morbidities associated with NAFLD included obesity (51.34%), type 2 diabetes mellitus (22.51%), hyperlipidemia (69.16%), hypertension (39.34%), and metabolic syndrome (42.54%).

Younossi ZM et al(19) conducted a population-based study and found the prevalence of alcoholic liver disease to be approximately 2% in the US general population with an estimated mortality of 5.5 per 100,000.

INDIAN EPIDEMIOLOGY

In India, NAFLD has emerged as a major public health problem. It is majorly related to lifestyle changes including the consumption of high-calorie junk foods and a sedentary lifestyle apart from the increasing prevalence of diabetes mellitus and obesity. It is well known that the link between NAFLD, insulin resistance, obesity, and type 2 diabetes mellitus is sinister.

The prevalence of NAFLD among the general population in India ranges from 9% to 53% which includes both field studies and hospital-based studies. This wide variation in the reported prevalence could be related to regional socio-cultural variation, rural-urban divide, differing eating patterns in different parts of the country, and different diagnostic techniques used in various studies.

POPULATION-BASED STUDIES

In a field epidemiological study conducted by Das K. et al [20] comprising 1,911 adult inhabitants of a rural area in West Bengal, India, the prevalence of NAFLD was found to be 8.7%. Abdominal obesity, hyperglycemia (fasting plasma glucose >100 mg/dL or elevated homeostatic model assessment of insulin resistance), and higher income were the risk factors associated with liver disease. Even having a normal BMI (18.5-24.9 kg/m^2) was associated with a two-fold increased risk of NAFLD versus those with a BMI < 18.5 kg/m^2.

A population-based study was conducted in Trivandrum, Kerela by Chalmers J. et al [21] which included a total of 2,222 participants both from rural and urban areas. The NAFLD prevalence was found to be 49.8% which was significantly higher than the global prevalence of 25%. It was found that for every unit increase in BMI, the odds of having NAFLD increased by 1.17 (17%), and the urban domicile (59.9) was found to have a higher risk for NAFLD than rural areas (40.1).

Another population-based study was conducted by Amarapurkar D et al.[22] at two railway colonies in Central Mumbai, India with 1,168 participants. Prevalence of NAFLD on ultrasound was found to be 16.6% with NAFLD more prevalent in males than females. Risk factors associated with NAFLD were an age of more than 40 years, male gender, central obesity, high BMI > $25kg/m^2$, elevated fasting blood sugar, and raised AST and ALT.

Mohan V et al. [23] conducted a population-based study in Chennai which included 541 subjects. The prevalence of NAFLD diagnosed by ultrasonography was found to be 32% (men: 35.1%, women: 29.1%). Prevalence of NAFLD was higher in subjects with DM (54.5%) compared

to those with prediabetes (33%), isolated IGT (32.4%), isolated IFG (27.3%), and normal glucose tolerance (NGT) (22.5%).

Singh SP et al. [24] conducted a study that included apparently healthy 159 attendants of patients attending a medical college, Cuttack. On ultrasonography, fatty liver was diagnosed in 39 of 159 patients (24.5%). Fatty liver was seen more commonly in males (26.9%) than in females (13.8%).

As a part of an ongoing community-based Prospective Urban Rural Epidemiological (PURE) cohort study, Mahajan R, Duseja A, et al. [25] analyzed 594 (296-urban, 258-rural) participants. The prevalence of NAFLD was found to be higher in the urban (53.7%) than rural (30.2%) population. Metabolic syndrome was present in 64.8% and 59.0% of participants in urban and rural populations respectively.

Duseja A et al.[26] conducted a prospective study over 18 months which included 986 blood donors. Ultrasonography was done and 543(55.1%) patients were found to have fatty liver [15 (1.5%) alcoholic fatty liver and 528 (53.5%) NAFLD]. Participants with NAFLD, when compared to those without NAFLD, had significantly higher age, BMI, waist circumference, blood pressure, total cholesterol and triglycerides, low-density lipoprotein, and fasting plasma glucose.

STUDIES IN HIGH-RISK GROUPS

Kalra S, et al [27] conducted a study including a total of 924 (355 female/569 male) nonalcoholic Indian type 2 diabetic (T2DM) patients, at 189 centers across 101 cities in India, out of which 522(56.5%) T2DM patients were identified as having NAFLD. Prevalence of NAFLD was found to be higher in females (60%) than in males (54.3%) DM patients, with the prevalence of NAFLD varying from 44.1% in western India to 72.4% in northern states. The prevalence of NAFLD was found to be increasing with increasing age, with the highest prevalence recorded in the 61–70 year age group.

Gupte P, Amarapurkar D, et al. [28] conducted a prospective study in Mumbai, Maharashtra which included 100 nonalcoholic individuals with type 2 DM. Forty-nine patients had evidence of fatty liver on the US abdomen, and 32 of these 49 patients underwent liver biopsy. Four of

32 (12.5%) individuals had steatosis alone. Mild, moderate and severe NASH was present in 21(65.5%), 4(12.5%) and 3(9.35%) patients, respectively. Fibrosis was found in 7(21.8%) patients.

HEPATIC INDICES

Though percutaneous liver biopsy remains the gold standard for the diagnosis of hepatic steatosis, due to drawbacks like the risk of complications, costs, and sampling errors, non-invasive hepatic markers and ultrasonography are more frequently utilized nowadays. The various indices used include:

(A) Hepatic steatosis index (HSI)

Leea JH, et al.[29] conducted a cross-sectional study with 10,724 health check-up subjects and after analysis, it was found that high serum alanine aminotransferase (ALT) to serum aspartate aminotransferase (AST) ratio, high body mass index (BMI), and diabetes mellitus were independent risk factors of NAFLD. Using these variables, a formula was derived:

HSI= 8 x ALT/AST + BMI (+2 if diabetes mellitus, +2 if female)

It was postulated that the HSI value of <30 ruled out NAFLD with a sensitivity of 93.1% and>36.0 detected NAFLD with a specificity of 92.4%.

(B) APRI Score (Aspartate aminotransferase to platelet ratio index) is a simple and efficient tool for the detection of liver dysfunction, especially fibrosis. Wai CT et al[30] generated a list of Chronic Hepatitis C patients who underwent percutaneous liver biopsy at the University of Michigan Medical Center in 2001-2002. AST to platelet ratio index (APRI), was developed to amplify the opposing effects of liver fibrosis on AST and platelet count. For patients with an APRI of 0.50 or less, 85% of subjects would not have significant fibrosis, and for patients with APRI greater than 1.50, 88% of subjects would have significant fibrosis.

$$\text{APRI score} = \frac{\text{Aspartate aminotransferase (in IU/liter)}}{\text{AST upper limit of normal value (in IU/liter)} \times \text{Platelet count (in } 10^9\text{/liter)}}$$

Lin ZH, Xin YN, et al.[31] conducted a meta-analysis including 40 studies to systematically assess the accuracy of APRI in predicting significant fibrosis, severe fibrosis, and cirrhosis stage. For significant

fibrosis, an APRI threshold of 0.7 was 77% sensitive and 72% specific. For severe fibrosis, a threshold of 1.0 was 61% sensitive and 64% specific. For cirrhosis, a threshold of 1.0 was 76% sensitive and 72% specific.

(C) FIB-4 score is a simple tool used for the estimation of liver fibrosis. Sterling RK et al. [32] conducted a retrospective analysis of liver histology performed on 832 patients from 95 centers in 19 countries. It was revealed that platelet count, age, AST, and ALT were significantly associated with fibrosis. Based on these findings, the FIB-4 index was developed. The study showed that a cutoff of 3.25 had a positive predictive value of 65% and a specificity of 97% for liver fibrosis.

$$\text{FIB-4 Score} = \frac{\text{Age X AST.}}{\text{Platelet count X } \sqrt{\text{ALT}}}$$

FIB-4 score	Approximate fibrosis stage
<1.45	0-1
1.45-3.25	2-3
>3.25	4-6

(D) BARD score:

Harrison SA et al.[33] analyzed 827 patients with NAFLD at two tertiary medical centers. After comparing patients with no fibrosis or mild fibrosis to those with advanced fibrosis, BMI >28 kg/m^2, age >50 years, aspartate transaminase/alanine aminotransferase (AST/ALT) ratio >0.8, and diabetes mellitus (DM) were individually found to be associated with advanced fibrosis. Based on the results, three variables were combined to form the BARD score. A score of 2–4 was associated with an odds ratio for advanced fibrosis of 17 and a negative predictive value of 96%.

Variable		Points
BMI ≥ 28	No	0
	Yes	1
AST to ALT ratio ≥0.8	No	0
	Yes	2
Diabetes	No	0
	Yes	1

BARD score	Risk of advanced fibrosis
0-1	Low
2-4	High

(E) NAFLD score

NAFLD score can be used to predict which patients are likely to have cellular evidence of fibrosis on biopsy using routine investigations. Angulo P et al.[34] in 2007 analyzed 733 patients with NAFLD confirmed by liver biopsy. Age, hyperglycemia, body mass index, platelet count, albumin, and AST/ALT ratio were found to be independent indicators of advanced liver fibrosis. A scoring system with these 6 variables was constructed. It was found that by applying a low cut-off score (1.455), advanced fibrosis could be excluded with high accuracy. By applying the high cutoff score (0.676), the presence of advanced fibrosis could be diagnosed with high accuracy

NAFLD score = -1.675 + [0.037 x age (years)] + [0.094 x BMI (kg/m^2)] + [1.13 x diabetes (yes=1, no=0)] + [0.99 x AST/ALT ratio] – [0.013 x platelet count(x10^9/litre)] – [0.66 x albumin(g/dl)]

NAFLD score	Fibrosis Severity
<-1.455	F0-F2
-1.455 – 0.675	Indeterminate score
>0.675	F3-F4

ULTRASONOGRAPHY- Ultrasound is the most commonly used modality for the diagnosis and grading of fatty liver. It is a safe, radiation-free, easily available, and cost-effective way to determine fatty infiltration of the liver. The normal liver parenchyma has a homogeneous echotexture and echogenicity equal to that of the renal cortex and spleen. Due to fatty infiltration, the liver shows echogenicity higher than the renal cortex and spleen. These are however subject to inter-observer variation.

Grading of steatosis is done based on analysis of the intensity of the echogenicity. [35]

- Grade I: diffusely increased hepatic echogenicity but periportal and diaphragmatic echogenicity is still appreciable.
- Grade II: diffusely increased hepatic echogenicity obscuring periportal echogenicity but diaphragmatic echogenicity is still appreciable.
- Grade III: diffusely increased hepatic echogenicity obscuring periportal as well as diaphragmatic echogenicity.

Joseph EA et al.[36] conducted a prospective comparative study to establish the accuracy of ultrasonography in assessing diffuse parenchymal liver disease. They performed percutaneous biopsy followed by histology in 50 patients within 24 hours of the ultrasound examination and ultrasonography was performed by a single operator. Steatosis and increased fibrous tissue on histology were found in 36 and 31 patients respectively. Ultrasonography correctly identified steatosis in 32/36 (89%) patients including all patients with the severe grade. Increased fibrous tissue was correctly identified in 24/31 (77%) with a sensitivity of 100% in patients with moderate fibrosis and established cirrhosis. Specificity was 93% for steatosis and 89% for increased fibrous tissue.

SARCOPENIA

Sarcopenia is a syndrome characterized by progressive and generalized loss of skeletal muscle mass and strength and it is correlated with a physical disability, poor quality of life, and death. Sarcopenia was primarily considered an aging disorder in the past but now is considered a multifactorial disorder including changes in hormones, immobility, nutrition, and other neurodegenerative changes.

Lean muscle mass generally contributes up to ~50% of total body weight in young adults but declines with aging to be 25% at 75–80 years old. The loss of muscle mass is typically accompanied by a gain in fat mass. The loss of muscle mass is most notable in the lower limb muscle group, with the cross-sectional area of the vastus lateralis being reduced by as much as 40% between the age of 20 and 80 years. On the muscle fiber level, sarcopenia is characterized by specific type II muscle fiber atrophy

and fiber necrosis. The coexistence of a high accumulation of fat mass and simultaneous low skeletal muscle mass has been termed sarcopenic obesity

DIAGNOSIS OF SARCOPENIA

The original diagnosis of sarcopenia began with low muscle mass detection. This concept was changed since muscle strength and performance in combination with muscle mass were found to be a better predictor of adverse outcomes than muscle mass alone. It was also demonstrated that dual-energy X-ray absorptiometry could be considered a reference standard (but not a gold standard) for measuring muscle lean body mass. [37]

The definition and diagnostic criteria of sarcopenia are still evolving as new findings challenge the earlier understanding of the topic. The European Working Group on Sarcopenia in Older People (EWGSOP)[7] developed a practical clinical definition in 2010:

- Presarcopenia- characterized by low muscle mass without impact on muscle strength or physical performance.
- Sarcopenia- characterized by low muscle mass, plus low muscle strength or low physical performance.
- Severe sarcopenia- characterized by low muscle mass, low muscle strength, and low physical performance.

In 2018, revised EWGSOP [5] guidelines were published with a major amendment that muscle strength comes to the forefront, as it was recognized that muscle strength is better than muscle mass in predicting adverse outcomes. The staging system for sarcopenia under EWGSOP 2018:

- Probable sarcopenia- decreased muscle strength but have no impact on muscle mass or performance.
- Sarcopenia- decreased muscle strength and mass
- Severe sarcopenia- decreased muscle strength with decreased muscle mass and performance[5]

Asian Working Group for Sarcopenia[8] 2019 published a consensus on the definition of sarcopenia.

- Possible sarcopenia: low muscle strength or low physical performance
- Sarcopenia: Low muscle mass + low muscle strength or Low physical performance
- Severe sarcopenia: Low muscle mass, low muscle strength, and Low physical performance

SARC-F: It is a community screening tool for sarcopenia first devised by Malmstrom TK et al[38]. Later, Jean Woo et al[39] conducted a prospective cohort study including 4000 men and women in the Hong Kong community. A questionnaire regarding the ability to carry a heavy load, walk, rise from a chair, climb stairs, and fall frequency was administered. These questions were used to calculate the SARC-F score. Measurements were taken using dual-energy X-ray absorptiometry, grip strength using a dynamometer, 6-m gait speed, and time taken for repeated chair stand. The results showed that SARC-F has excellent specificity (94% to 99%) and negative predictive value but poor sensitivity for sarcopenia.

SARC F scoring system		
Component	Question	Scoring
Strength	How much difficulty do you have in lifting and carrying 10 pounds (4.5kg)?	None 0 Some 1 A lot or unable 2
Assistance in walking	How much difficulty do you have walking across a room?	None 0 Some 1 A lot, use aids, or unable 2
Rise from a chair	How much difficulty do you have transferring from a chair or bed?	None 0 Some 1 A lot or unable without help 2

Climb stairs	How much difficulty do you have climbing a flight of 10 stairs?	None 0 Some 1 A lot or unable 2
Falls	How many times have you fallen in the past year?	None 0 1-3 falls 1 4 or more falls 2

A score of equal to or more than four have a higher risk of having sarcopenia[39]

SKELETAL MUSCLE MASS - Skeletal Muscle Mass is calculated as the appendicular skeletal muscle mass (ASM). Lee RC et al[40] recruited 135 healthy males and 109 healthy females for their study. Two costly methods were available for estimating skeletal muscle mass: computed axial tomography (CT) and magnetic resonance imaging (MRI). A practical alternative to CT and MRI for measuring skeletal muscle mass is anthropometry. After the analysis, it was found that there was no significant difference between MRI-measured skeletal mass and skeletal muscle mass predicted from the equation. One of the equations was

ASM= (0.244 × weight) + (7.8 × height) + (6.6 × sex) – (0.098 × age) + (race-3.3)

[Where female = 0 and male = 1; race = 0 (White and Hispanic), race = 1.9 (Black), and race = -1.6 (Asian)].

ASM was further divided by BMI to create a Skeletal Muscle Mass Index (SMI). Stephanie A et al[41] conducted The FNIH (Foundation for the National Institutes of Health) Sarcopenia Project intending to use multiple existing data sources to identify criteria for clinically relevant weakness and low lean mass. A total of nine studies were analyzed which included a total of 30,772 participants. After analysis, the recommended cut-off points for SMI were <0.789 for men and <0.512 for women.

SKELETAL MUSCLE STRENGTH- Skeletal muscle strength is assessed by hand grip strength (HGS) which is assessed by a

dynamometer. The handheld dynamometer (HHD) was first described by Lovett and Martin in 1919. [42]

Stark T et al [43] conducted a systematic review that included 19 studies in which the authors compared hand-held dynamometry and isokinetic muscle strength testing. It was concluded that HHD is a reliable, valid, cost-effective instrument for measuring muscle strength

The recommended cut-off points for weakness as postulated by the FNIH sarcopenia project are grip strength <26kg for men and <16kg for women.[41]

SKELETAL MUSCLE FUNCTION- Skeletal muscle function can be assessed by short physical performance battery test (SPPB), which involves an objective assessment of 3 parameters:

1. Repeated chair stands
2. Balance test
3. 8 feet walk test

Guralnik JM et al.[44] conducted a longitudinal study in which a short battery of physical performance tests was used to assess lower extremity function in more than 5,000 persons aged 71 years and older. Balance, gait, strength, and endurance were evaluated by examining the patient's ability to stand with the feet together in the side-by-side, semi-tandem, and tandem positions, time to walk 8 feet, and time to rise from a chair and return to the seated position 5 times. A strong association was found between performance measures of lower extremity function and self-reported disability in this study.

Parameters		Score
Repeated chair stands	Unable to complete 5 chair stands	0
	>16.7 seconds	1
	13.7- 16.6 seconds	2
	11.2- 13.6 seconds	3
	<11.2	4
Balance	Side-to-side stand <10 seconds	0
	>10 seconds	1
	Semi-tandem stand <10 seconds	0

	>10 seconds	1
	Tandem stand > or = 10 seconds	2
	3.00- 9.99 seconds	1
	<3.00 seconds	0
8 feet walk test	Unable to walk	0
	>8.70 seconds	1
	6.21- 8.70 seconds	2
	4.82- 6.20 seconds	3
	<4.82 seconds	4

Phu S et al. [45] conducted a cross-sectional analysis of 294 community dwellers and SPPB demonstrated moderate value in diagnosing sarcopenia, and a cut-point of ≤8 points in SPPB performance resulted in high sensitivity (82–100%) but low specificity (36–41%) for diagnosing those with severe sarcopenia. The high sensitivity of the SPPB when using the cut-point of ≤8 suggests it may be a favorable screening tool for sarcopenia.

EPIDEMIOLOGY OF SARCOPENIA

WORLDWIDE EPIDEMIOLOGY

Pagotto V et al. [46] conducted a systematic review that analyzed 671 studies dating from 1998 to 2012, out of which 28 met the inclusion criteria of the analysis. When measured by dual-X-ray absorptiometry, the prevalence ranged from 2.2% to 95% in men and from 0.1% to 33.9% in women. For bioelectrical impedance analysis, the range was from 6.2% to 85.4% in men and 2.8% to 23.6% in women. Regarding anthropometric and computed tomography, prevalence rates were 14.1% and 55.9%, respectively.

Shafiee G et al [9] conducted a meta-analysis that included 35 articles published between January 2009 to December 2016 to estimate the overall prevalence of sarcopenia in different regions of the world. The meta-analysis included a total of 58,404 individuals. The overall estimate of prevalence was found to be 10% in men and 10% in women. The prevalence was higher among non-Asian than Asian individuals in both genders.

Rocha FP et al [47] conducted a meta-analysis in 2021 including 151 studies and a total of 6,92,056 participants. Due to the use of different classifications and cut-off points, the prevalence ranged from 8% to 36% in individuals <60 years and from 10% to 27% in ≥60 years The prevalence of severe sarcopenia ranged from 2% to 9%. The highest and lowest prevalence of sarcopenia was observed in Oceania and Europe.

ASIAN EPIDEMIOLOGY

Kowal P et al.[10] conducted a study on global AGEing and adult health (SAGE) in China, Ghana, India, Mexico, Russia, and South Africa between 2007 and 2010. The total number of subjects included in the study was 18,363. Of the total sample, 15.2% and 4.7% had sarcopenia and sarcopenic obesity, respectively. The prevalence of sarcopenia in the Indian population was found to be 17.5%.

Xin Wu et al.[48] conducted a study including a total of 6,172 participants aged 60–94 years among the Chinese population. Using the diagnostic criteria of the Asian Working Group for Sarcopenia 2019 (AWGS 2019), the prevalence of possible sarcopenia, sarcopenia, and severe sarcopenia was found to be 38.5%, 18.6%, and 8.0%, respectively. Age, rural area, number of falls, higher C-reactive protein (CRP), and chronic diseases (including hypertension, chronic lung diseases, heart disease, psychiatric disease, and arthritis were associated with a higher risk of possible sarcopenia.

A cross-sectional study was conducted by Kim M et al. [49] which included a total of 2123 community-dwelling older Korean adults, aged 70 to 84 years. The prevalence rates of possible sarcopenia according to diagnostic criteria of AWGS 2019 were 20.1% in men and 29.2% in women. The prevalence rates of sarcopenia were 21.3% in men and 13.8% in women. The prevalence of severe sarcopenia was 6.4% in men and 3.2% in women.

INDIAN EPIDEMIOLOGY

Shaikh N et al.[50] conducted a cross-sectional study in 2018 including 240 elderly people (118 men and 122 women), in rural areas of Karnataka. Height, weight, gait speed (using an 8-feet walk test), and

muscle strength (using a handgrip dynamometer) were measured. Sarcopenia was found in 34 (14.2%) participants. Of all those having sarcopenia, 27 (79.4%) were ≤75 years, 30 (88.2%) were women, 27 (79.4%) were married, and 23 (67.6%) had below the poverty line status. Pal R et al.[51] conducted the Sarcopenia-Chandigarh Urban Bone Epidemiological Study (Sarco-CUBES) in which 804 adults (aged > 20 years) with no background history of comorbidities were enrolled from the community by a door-to-door survey. Muscle mass, muscle strength, and physical performance were expressed as appendicular skeletal muscle index (SMI), dominant handgrip strength (HGS), and usual gait speed, respectively. According to definitions as per EWGSOP2 recommendations, the prevalence of 'probable sarcopenia', 'sarcopenia', and 'severe sarcopenia' was found to be 14.6%, 3.2%, and 2.3%, respectively.

Pal R et al.[52] conducted a study from December 2016 to June 2019 to determine the prevalence of sarcopenia obesity (SO) in healthy Indian adults and to delineate the relative impact of the 3 indices of obesity [body mass index (BMI), waist circumference (WC), fat mass percentage (FM%)]. After analysis, the prevalence of sarcopenia was 3.2%. Based on BMI, WC, and FM%, the prevalence of SO in elderly subjects (>65 years) was 5.4%, 5.4%, and 6.3%, respectively.

SARCOPENIA IN PATIENTS WITH FATTY LIVER

Sarcopenia and hepatic steatosis share similar pathological mediators, such as chronic inflammation, insulin resistance, oxidative stress, and physical inactivity. Multiple studies have been conducted to study the pattern and correlation of sarcopenia in patients with fatty liver.

WORLDWIDE

Issa D et al. [53] conducted a study in the US and divided the subjects into three groups, each one including 25 individuals: a control group, NASH, and a NASH cirrhosis group. The diagnosis of NASH was proven by liver biopsy. Sarcopenia assessment was done by measuring the cross-sectional area of the psoas and paraspinal muscles at the level of the midpoint of the L4 vertebra on a CT scan. After analysis, the results showed that patients with NASH and NASH-related cirrhosis were older

and had a higher body mass index than the control group. There was a stepwise significant decrease in the psoas and paraspinal muscle area from the control group to the NASH group to the cirrhosis group.

Petta S et al. [54] conducted a study in Italy on 225 patients with histological diagnosis of NAFLD. Sarcopenia was diagnosed by measuring the skeletal muscle index by bioelectrical impedance analysis. After analysis, it was found that the prevalence of sarcopenia showed a linear increase with the severity of fibrosis, and severe fibrosis (F3–F4) was more than doubled in sarcopenia. Similarly, a significant association was found between sarcopenia and NASH, steatosis severity, and ballooning.

ASIA

The earliest evidence of a link between sarcopenia and NAFLD came from the Korean Sarcopenic Obesity Study. Hong HC et al. [15] conducted The Korean Sarcopenic Obesity Study, a prospective observational cohort study, and enrolled 452 adults. NAFLD was diagnosed by liver attenuation index (LAI) using computed tomography (CT). Sarcopenia was defined using a skeletal muscle mass index (SMI) measured by dual-energy X-ray absorptiometry (DXA). After analysis, the odds ratio for NAFLD risk was 5.16 in the lowest quartile of SMI compared to the highest suggesting that individuals with lower muscle mass exhibited an increased risk of NAFLD. After adjusting for age and sex, SMI and LAI were negatively correlated with most of the cardio-metabolic risk factors, including HOMA-IR, hs-CRP, and brachial-ankle pulse wave velocity values. Additionally, SMI and LAI were also negatively correlated with triglyceride, alanine aminotransferase (ALT), and total body fat mass.

Kim G et al.[55] conducted a 7-year population-based longitudinal study including 12,624 subjects without baseline NAFLD and 1,864 subjects with baseline NAFLD to analyze changes in relative skeletal muscle mass (skeletal muscle mass index) from August 2006 through August 2013 in Seoul, Republic of Korea. Subjects were defined as having NAFLD by the hepatic steatosis index. Of the 12,624 subjects without baseline NAFLD, 1,864 (14.8%) developed NAFLD during the 7-year follow-up period. Compared to the lowest sex-specific SMI tertile at

baseline, the highest tertile was inversely associated with incident NAFLD and positively associated with the resolution of baseline NAFLD. Furthermore, compared to the lowest tertile of change in SMI over a year, the highest tertile exhibited a significant beneficial association with incident NAFLD and resolution of baseline NAFLD even after adjustment for baseline SMI. Among 2,943 subjects with NAFLD at baseline, NAFLD resolved only in 79 (2.7%) individuals during the 7 years of the study period. The cumulative incidence of resolution of NAFLD was significantly higher in subjects in higher tertiles of baseline SMI compared to those in the lowest tertile.

Kang S et al. [56] investigated the association between muscle strength and the prevalence of NAFLD and advanced fibrosis using the Korean National Health and Nutrition Examination Surveys (KNHANES) database from 2014 to 2016 and selected 14,861 individuals. Muscle strength was quantified as the handgrip strength divided by the body mass index (BMI); low muscle strength was defined as the lowest quartile (Q1) of the handgrip strength/BMI for the sample population. NAFLD was defined as hepatic steatosis index >36. Advanced fibrosis was defined as a fibrosis-4 index score ≥1.30 (FIB-4). After analysis, low muscle strength was associated with an increased prevalence of NAFLD. The prevalence of NAFLD decreased by 24% with each quartile increment in muscle strength. Among individuals with NAFLD (n = 2092), low muscle strength was significantly associated with the presence of advanced fibrosis.

Kimm BJ et al. [57] conducted a population-based cross-sectional study between January 2014 and December 2015 using data from the Korea National Health and Nutrition Examination Survey, which involved 1,897 men aged ≥50 years and 2,206 postmenopausal women. NAFLD was defined using the hepatic steatosis index (HSI) and low muscle strength was defined using the Korea-specific cut-off point of hand grip strength (HGS). Men and women with NAFLD had 7.3% and 7.9% lower HGS than controls, respectively. The odds ratios for low muscle strength in the presence of NAFLD were 2.51 in men and 2.34 in women. Consistently, compared with men and women in the lowest HSI quartile,

those in the highest quartile had 7.6% and 12.4% lower HGS, respectively, and were 5.63- and 3.58 times more likely to have low muscle strength, respectively.

A 10-Year Retrospective Cohort Study was conducted by Lee MJ et al.[58] which involved 4,398 initially NAFLD-free subjects who underwent routine health examinations from 2004 to 2005 and returned for a follow-up from 2014 to 2015. At the 10-year follow-up, 591 out of 4,398 participants (13.4%) developed NAFLD. Both increased fat mass and decreased appendicular skeletal muscle mass (ASM) with aging were significantly associated with incident NAFLD.

MATERIALS AND METHODS

SOURCE OF DATA

A total of 200 patients with fatty liver under the Department of Medicine and Endocrinology at DMCH, Ludhiana were approached for the study. The purpose of the study was explained to the participants and they were explained clearly that their participation is entirely voluntary. Informed consent was obtained from the willing participants.

A structured pre-designed Performa was used for this study. Performa was divided into 6 sections.

PART 1: This included basic demographic data including name, age, sex, occupation, and address.

PART 2: This included the history of present illness, and the past history of the patient including any chronic illness like diabetes mellitus, hypertension, bronchial asthma, tuberculosis, or any other illness. This also included the treatment history of the patient.

PART 3: This included personal history including the history of alcohol intake with its quantity and duration. It would also include the history of smoking and dietary pattern.

PART 4: This included the general physical examination and systemic physical examination. This also included the nutritional assessment of the patient including the anthropometric measurements

PART 5: This included the laboratory investigations of the patient including hemogram, liver function test, renal function test, lipid profile, diabetic status, and viral markers of the patient. The hepatic indices were calculated. It also included the ultrasonography report with the grade of fatty liver. Patients with cirrhosis and decompensated liver disease were excluded from the study. If the patient had undergone a fibroscan due to any indication, the patient with fibroscan showing fibrosis was excluded from the study.

PART 6: This included the sarcopenia assessment including SARC-F scoring, muscle mass, muscle strength, and muscle performance.

SKELETAL MUSCLE MASS- Skeletal muscle mass was assessed by Skeletal Mass Index (SMI) which was calculated by the underlying formula:

$$\text{Skeletal Mass Index} = \frac{\text{Appendicular Skeletal Mass (ASM)}}{\text{Body Mass Index}}$$

$$\text{Appendicular Skeletal Mass} = (0.244 \times \text{weight}) + (7.8 \times \text{height}) + (6.6 \times \text{sex}) - (0.098 \times \text{age}) + (\text{race}-3.3)$$

[where female = 0 and male = 1; race = 0 (White and Hispanic), race = 1.9 (Black), and race =1.6 (Asian)]. [40]:

The recommended cut-off points for SMI were <0.789 for men and <0.512 for women. [41]

SKELETAL MUSCLE STRENGTH- This was assessed by hand grip strength using a hand-held dynamometer. The patient was asked to sit in a chair with forearms resting on the arms of a chair and feet flat on the floor. The patient was demonstrated the use of a dynamometer. Six readings, three with each hand and each squeeze lasting for 3-5 seconds were noted and the highest reading was taken as the final result. The recommended cut-off points for low muscle strength were grip strength of <26kg for men and <16kg for women. [41]

SKELETAL MUSCLE PERFORMANCE/ FUNCTION- This was assessed using the Short physical performance battery (SPPB) test. It included a series of measures like gait speed, chair stand, and balance tests. The scores ranged from 0 to 12.

- Repeated chair stands- the patient was asked to repeatedly stand up and sit down as quickly as possible 5 times without stopping, with arms being kept across the chest. The total time taken by the patient was recorded by a stopwatch. The test was paused if the patient started using his/ her arms or if it is taking more than 1 minute to complete the test or patient develops respiratory distress.
- Balance test- Patient was asked to stand unsupported for 10 seconds with feet in specific positions- feet together, semi-tandem (heel of one foot placed by the big toe of the other foot),

and full tandem (feet directly in front of each other. The patient was allowed to use arms, bend the knees or move the body to maintain balance

- 8 feet walk test- Patient was asked to walk at his/her usual pace between to marked points 8 feet away. The time taken by the patient to cover the distance was recorded.

Parameters		Score
Repeated chair stands	Unable to complete 5 chair stands	0
	>16.7 seconds	1
	13.7- 16.6 seconds	2
	11.2- 13.6 seconds	3
	<11.2	4
Balance	Side to side stand <10 seconds	0
	>10 seconds	1
	Semi tandem stand <10 seconds	0
	>10 seconds	1
	Tandem stand > or = 10 seconds	2
	3.00- 9.99 seconds	1
	<3.00 seconds	0
8 feet walk test	Unable to walk	0
	>8.70 seconds	1
	6.21- 8.70 seconds	2
	4.82- 6.20 seconds	3
	<4.82 seconds	4

A cut-point of ≤8 scores of the SPPB showed a high sensitivity for the diagnosis of sarcopenia. [45]

METHOD OF COLLECTION OF DATA

Inclusion Criterion:

1. Patients diagnosed with fatty liver disease on ultrasonography.
2. Patients with a Hepatic Steatosis Index of more than or equal to 36

Exclusion Criterion:

1. Ultrasound showing cirrhosis or decompensated liver disease.

2. Patients with a Hepatic Steatosis Index of less than 36
3. APRI score >1
4. FIB-4 score >1.45
5. BARD score >2
6. NAFLD score >0.675
7. Fibroscan showing fibrosis
8. Pregnant females
9. Patient taking drugs causing fatty liver like steroids, methotrexate, tamoxifen, amiodarone, and valproic acid.
10. Diagnosed cases of muscle and neurological disorders leading to muscle wasting
11. Patient not willing to give consent.

NUMBER OF PATIENTS

A total of 200 patients

Outcome:

To Analyze the sarcopenic parameters including muscle mass, function, and performance, and their pattern and clinical correlation in patients with fatty liver.

Statistical Analysis:

Data were described in terms of range; mean ± standard deviation (± SD), median, frequencies (number of cases), and relative frequencies (percentages) as appropriate. A Kolmogorov-Smirnov test was used to determine whether the data were normally distributed. Comparison of quantitative variables between the study groups was done using the Student t-test and Mann-Whitney *U* test for independent samples for parametric and non-parametric data respectively. For comparing categorical data, Chi-square ($\chi 2$) test was performed and Fisher exact test was used when the expected frequency is less than 5. The Kappa value was also calculated. Sensitivity, specificity, accuracy, positive predictive value, and negative predictive value were calculated. A probability value (*p-value*) less than 0.05 was considered statistically significant. All statistical calculations were done using (Statistical Package for the Social Science) SPSS 20.0 version (Paid version) (SPSS Inc., Chicago, IL, USA) statistical program for Microsoft Windows.

OBSERVATIONS AND RESULTS

A total of 200 patients with evidence of fatty liver on ultrasonography were enrolled in our study after informed consent. A questionnaire including demographics, history, examination, anthropometry, lab investigations, hepatic indices, and sarcopenic assessment of the patients was structured. The collected data was analyzed to study the clinical correlation of sarcopenia in patients with fatty liver.

DEMOGRAPHICS (Table 1)

The baseline demographics of the cohort are shown in Table 1. The mean age of the cohort was 51.46 years with a standard deviation of ±16.78 years with a range from 16 to 92 years. The maximum number of patients were in the age group 41-60 years containing 81 patients (40.5%) followed by the 61-80 years age group (n=55, 27.5%). Out of 200 patients, 120 (60%) were male and 80 (40%) were female.

The co-morbidities of the patients included hypertension (49 patients, 24.5%), type 2 diabetes mellitus (19 patients, 9.5%), hypothyroidism (19 patients, 9.5%), and coronary artery disease (4 patients, 2.0%).

Out of 200 participants, only 17 (8.5%) had a history of alcohol consumption with a mean alcohol quantity of 94.53 ± 53.92 grams and with a mean duration of 18.82 ± 15.40 years.

On the assessment of the dietary habits, the maximum number of patients were non-vegetarians (138 patients, 69%) followed by lacto-ovo-vegetarian (52 patients, 26%), vegan (9 patients, 4.5%), semi-vegetarian (1 patient, 0.5%).

Table 1: BASELINE DEMOGRAPHIC CHARACTERISTICS OF PATIENTS

AGE GROUP		No. of cases	Percentage		
	< 20 years	3	1.5%	Minimum-16 Maximum-92	Mean-51.46 Standard deviation-16.78
	21-40 years	52	26.0%		
	41-60 years	81	40.5%		
	61-80 years	55	27.5%		
	> 80 years	9	4.5%		
	Total	200	100.0%		
SEX		No. of cases	Percentage		
	Female	80	40.0%		
	Male	120	60.0%		
	Total	200	100.0%		
OCCUPATION		No. of cases	Percentage		
	Businessman	49	24.5%		
	Driver	2	1.0%		
	Farmer	33	16.5%		
	Government Job	8	4.0%		
	Housewife	70	35.0%		
	Nurse	1	0.5%		
	Retired	20	10.0%		
	Student	16	8.0%		
	Unemployed	1	0.5%		
	Total	200	100.0%		
		No. of cases	Percentage		
	Diabetes Mellitus	19	9.5%		
	Hypertension	49	24.5%		

COMORBIDITY	Hypothyroidism	19	9.5%		
	CAD	4	2.0%		
	Chronic Hepatitis C	1	0.5%		
	Old Treated Koch	16	8.0%		
	Psoriasis	1	0.5%		
	Total	200	100.0%		
ALCOHOL INTAKE		No. of cases	Percentage		
	No	183	91.5%		
	Yes	17	8.5%		
	Total	200	100.0%		
	Number	Minimum	Maximum	Mean	Std. Deviation
ALCOHOL QUANTITIY(GM/DAY)	17	10.00	250.00	94.53	53.92
ALCOHOL DURATION (YEARS)	17	3.00	50.00	18.82	15.40
SMOKING		No. of cases	Percentage		
	N	200	100.0%		
DIETARY HABITS		No. of cases	Percentage		
	Vegan	9	4.5%		
	Lacto-Ovo-Vegetarian	52	26.0%		
	Pesco- Vegetarian	0	0.0%		
	Semi- Vegetarian	1	0.5%		
	Non- Vegetarian	138	69.0%		

Figure 1a: AGE DISTRIBUTION OF ALL PATIENTS

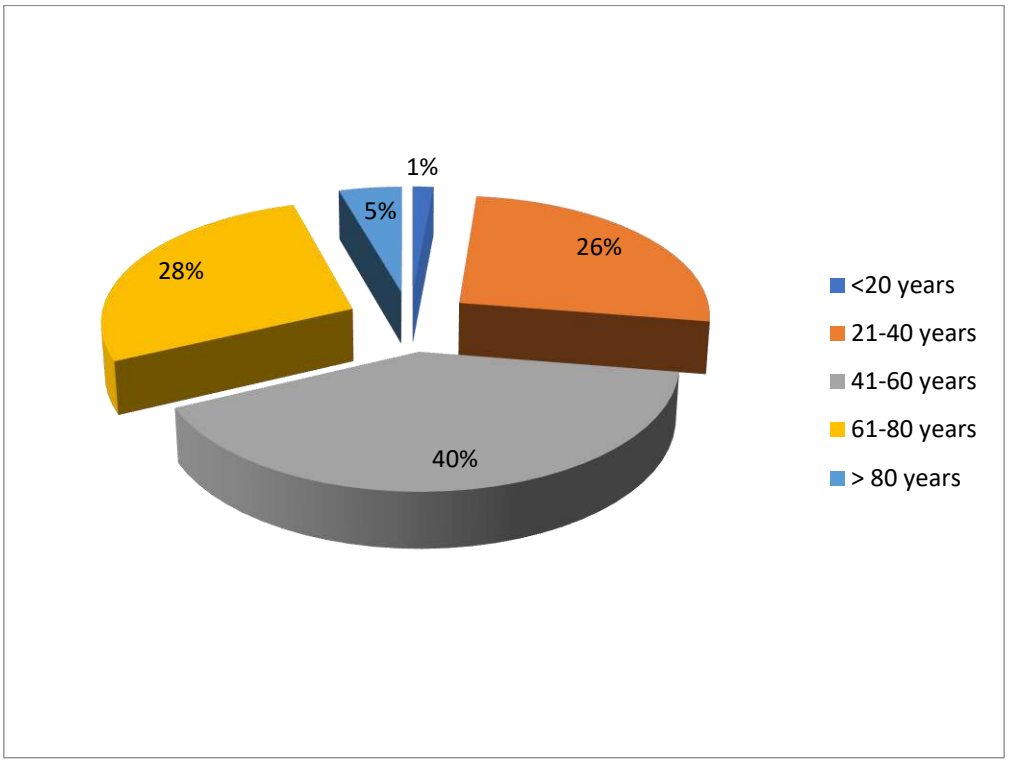


Figure 1b: GENDER DISTRIBUTION OF ALL PATIENTS

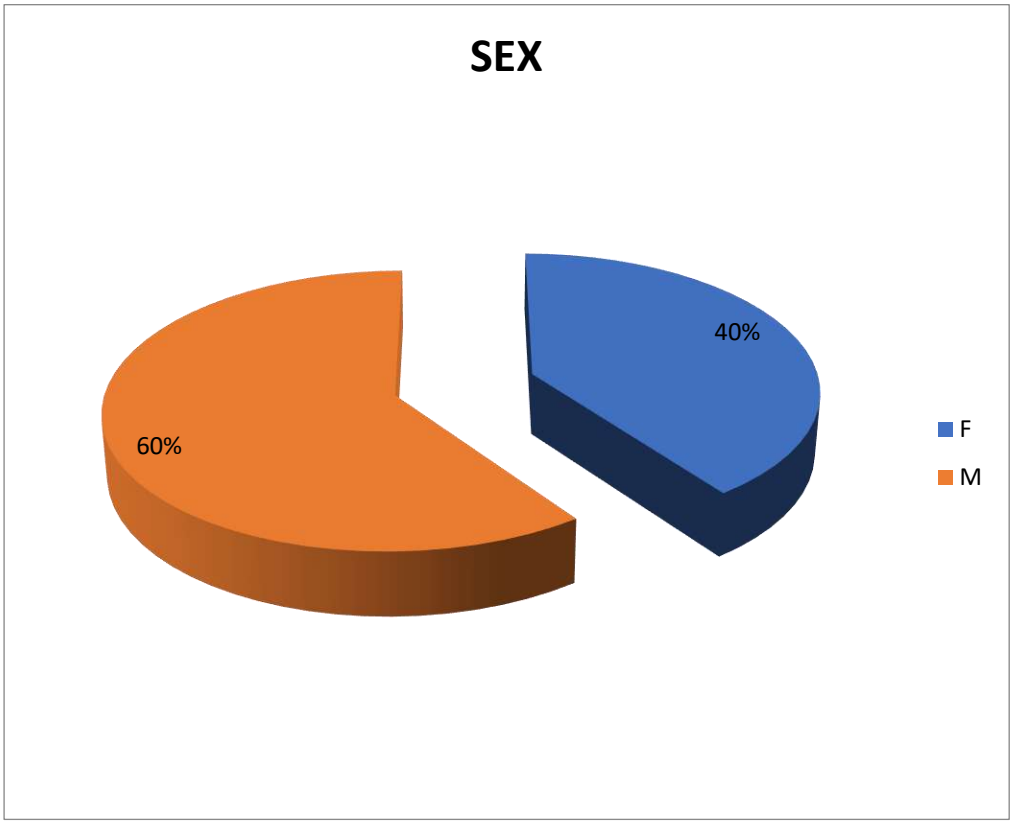


Figure 1c: OCCUPATION DISTRIBUTION OF ALL PATIENTS

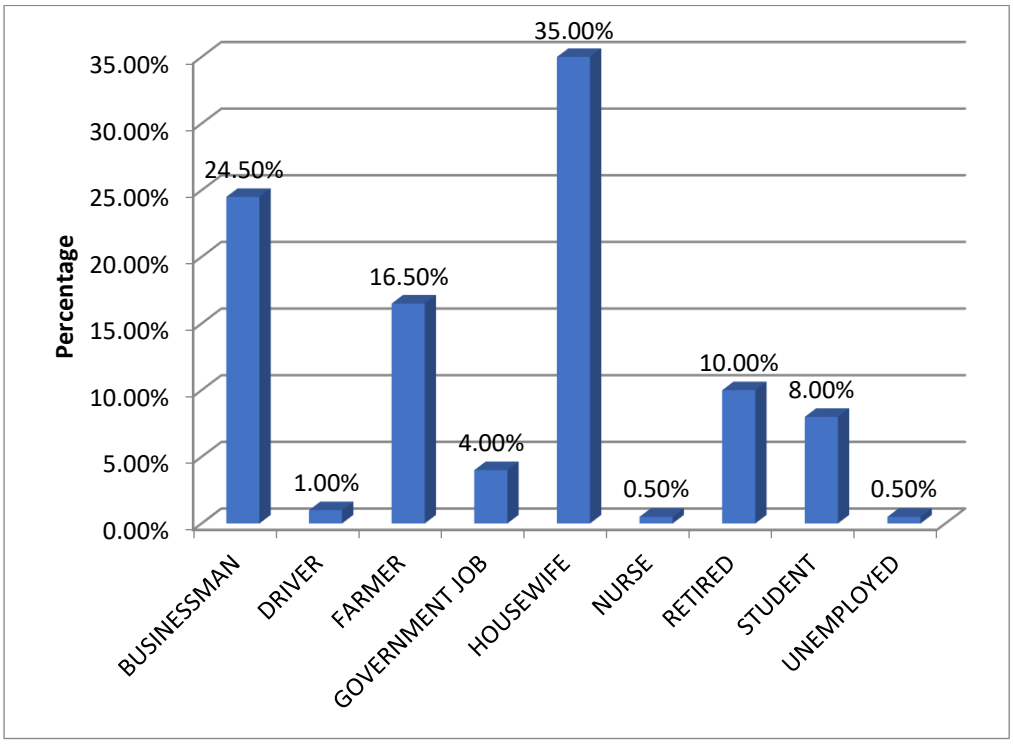


Figure 1d: CO-MORBITIES DISTRIBUTION OF ALL PATIENTS

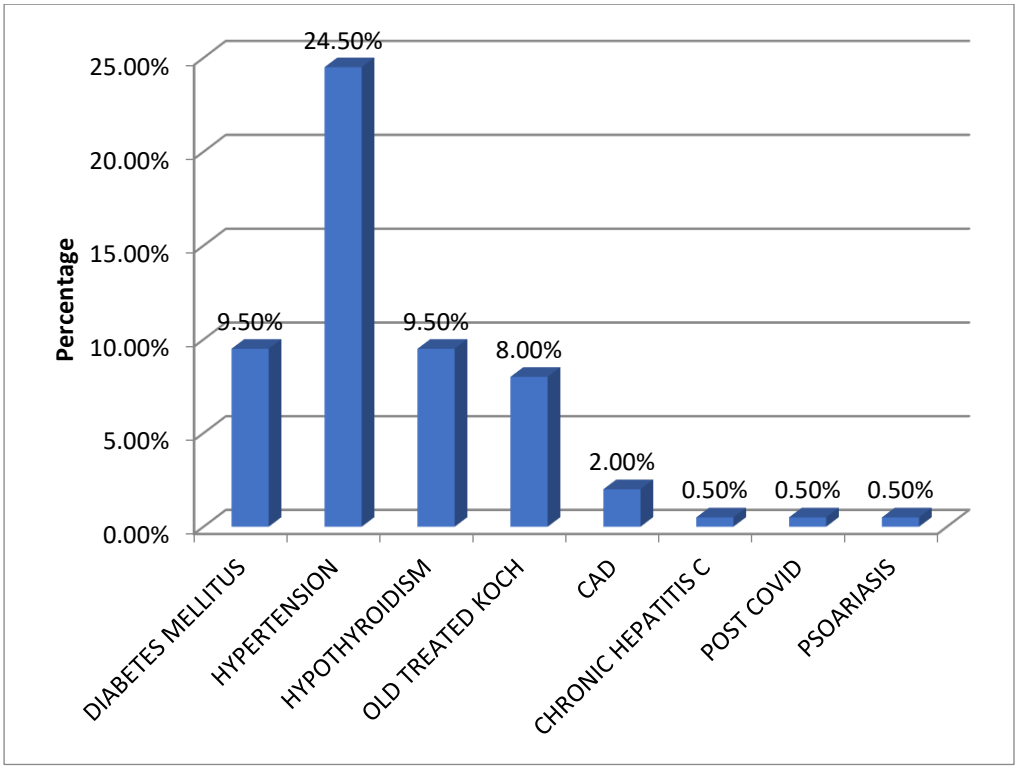


Figure 1e: ALCOHOL COMSUMPTION HISTORY AMONG PATIENTS

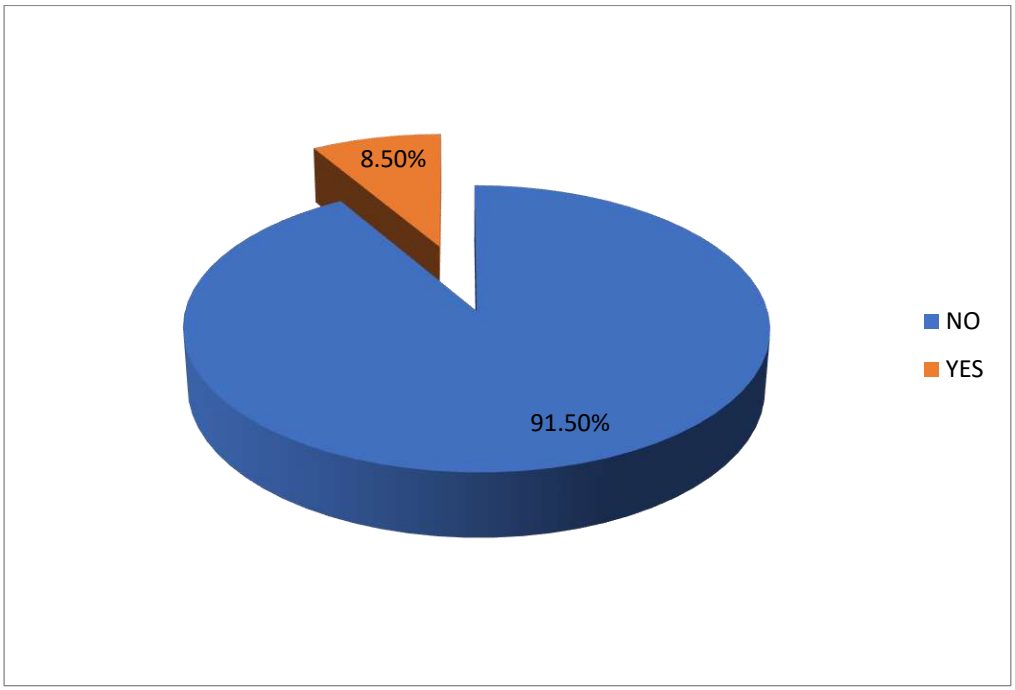
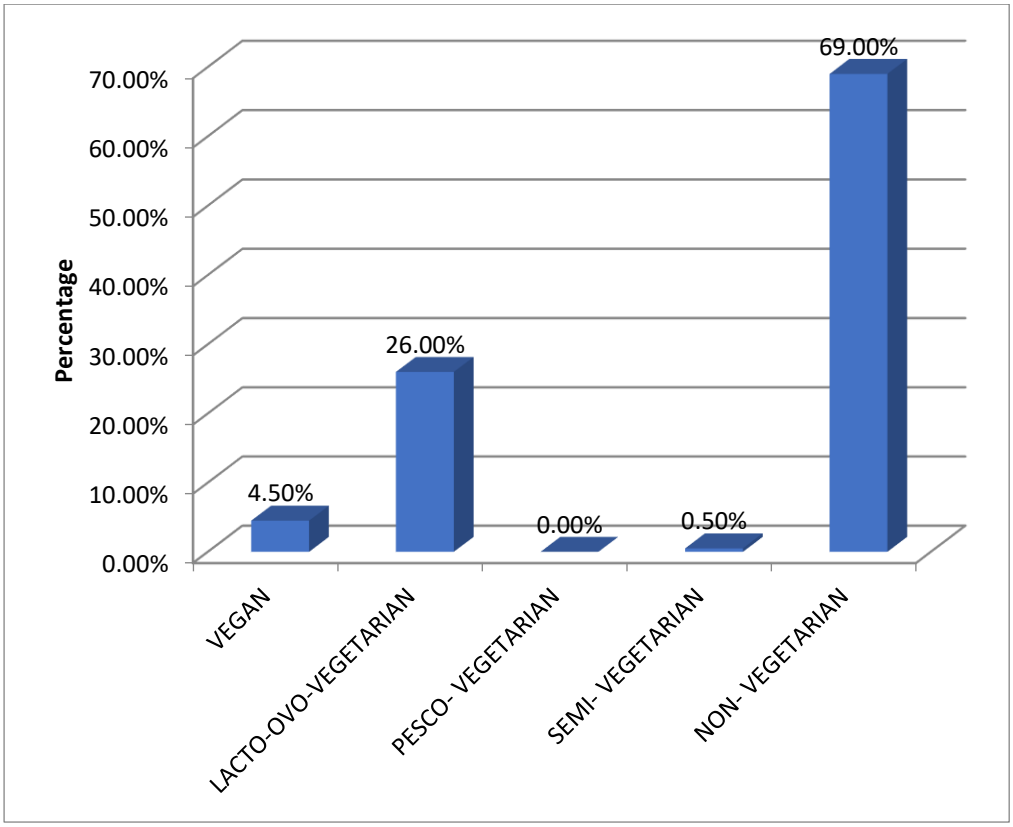


Figure 1f: DIETARY PATTERN AMONG ALL PATIENTS



ANTHROPOMETRY MEASUREMENTS (Table 2)

Out of 200 patients, the maximum number of patients were obese (112 patients, 56%) as per the Asian classification of BMI. Out of 112 obese patients, 61 patients (30.5%) were obese class I and 51 patients (25.5%) were obese class II. Out of 112 obese patients, 66 (33%) were male (obese 1: n= 39, 19.5%, obese 2: n= 27, 13.5%) and 46 (23%) were female (obese 1: n= 22, 11%, obese 2: n= 24, 12%). Thus, a greater number of males were obese than females. The categories underweight, normal weight, and overweight included 11 (5.5%), 43 (21.5%), and 34 (17%) patients, respectively. The mean BMI of the cohort was 26.21 ± 5.42 kg/m2 with a range from 13.15 to 40.56 kg/m2.

Waist circumference is a commonly used measure to measure central obesity (abdominal obesity). According to the waist circumference analysis in our study, 99 patients (49.5%) had central obesity (females: n=63, 31.5%, males: n=36, 18%). Thus, a greater proportion of females had central obesity as compared to males. The mean WC of the cohort was 95.39 ± 11.49 cm with a range from 55 to 127 cm.

As per the mid-arm circumference criteria for obesity (female >30cm, male >30.9cm), the number of obese patients, both male, and female were less than normal-weight patients.

A total of 64 (32%) patients had high mid-arm circumferences (male: 31, 15.5%, female: 33, 16.5%). The number of patients with high MAC, both males and females were less than the patients with low MAC. The mean mid-arm circumference of our study was 29.16 ± 5.28 cm with a range from 20 to 42 cm.

Subcutaneous fat stores were examined under the eyes, at the biceps and triceps muscles. The maximum number of patients (160, 80%) had good subcutaneous fat stores followed by 30 patients (15%) with fair stores and 10 patients (5%) with poor stores.

Muscle wasting was inspected at the temple, clavicle, shoulder, quadriceps, knee, and calf. Muscle wasting was found to be absent in 163 cases (81.5%) and moderate and poor muscle bulk in 32 (16%) and 5 (2.5%) patients, respectively.

Table 2: ANTHROPOMETRIC MEASUREMENTS

			No. of cases	Percentage	Min.	Max.	Mean	Std. Deviation
BMI	≤18.5 kg/m^2		11	5.5%	13.15	40.56	26.21	5.42
	18.5- 22.9 kg/m^2		43	21.5%				
	23- 24.9 kg/m^2		34	17%				
	25- 29.9 kg/m^2		61	30.5%				
	≥ 30 kg/m^2		51	25.5%				
	Total		200	100%				
WAIST CIRCUMFERENCE	Female	≤ 84 cm	17	8.5%	55.00	127.00	95.39	11.49
		>84 cm	63	31.5%				
	Male	≤98 cm	84	42%				
		>98 cm	36	18%				
	Total		200	100%				

MID ARM CIRCUMFERENCE	Female	≤ 30 cm	47	23.5%	20.00	42.00	28.96	3.82
		> 30 cm	33	16.5%				
	Male	≤ 30.9 cm	89	44.5%				
		>30.9 cm	31	15.5%				
	Total		200	100%				

SUBCUTANEOUS FAT STORES	**UNDER THE EYES**	No. of cases	Percentage
	Good	160	80.0%
	Fair	30	15.0%
	Poor	10	5.0%
	BICEPS	No. of cases	Percentage
	Good	160	80.0%
	Fair	30	15.0%
	Poor	10	5.0%
	TRICEPS	No. of cases	Percentage
	Good	160	80.0%
	Fair	30	15.0%
	Poor	10	5.0%
	TEMPLE	No. of cases	Percentage
	Absent	163	81.5%

MUSCLE WASTING	Moderate	32	16.0%
	Poor	5	2.5%
	CLAVICLE	No. of cases	Percentage
	Absent	163	81.5%
	Moderate	32	16.0%
	Poor	5	2.5%
	SHOULDER	No. of cases	Percentage
	Absent	163	81.5%
	Moderate	32	16.0%
	Poor	5	2.5%
	QUADRICEPS	No. of cases	Percentage
	Absent	163	81.5%
	Moderate	32	16.0%
	Poor	5	2.5%
	CALF	No. of cases	Percentage
	Absent	163	81.5%
	Moderate	32	16.0%
	Poor	5	2.5%
	KNEE	No. of cases	Percentage
	Absent	163	81.5%
	Moderate	32	16.0%
	Poor	5	2.5%

Figure 2a: BMI DISTRIBUTION OF ALL PATIENTS

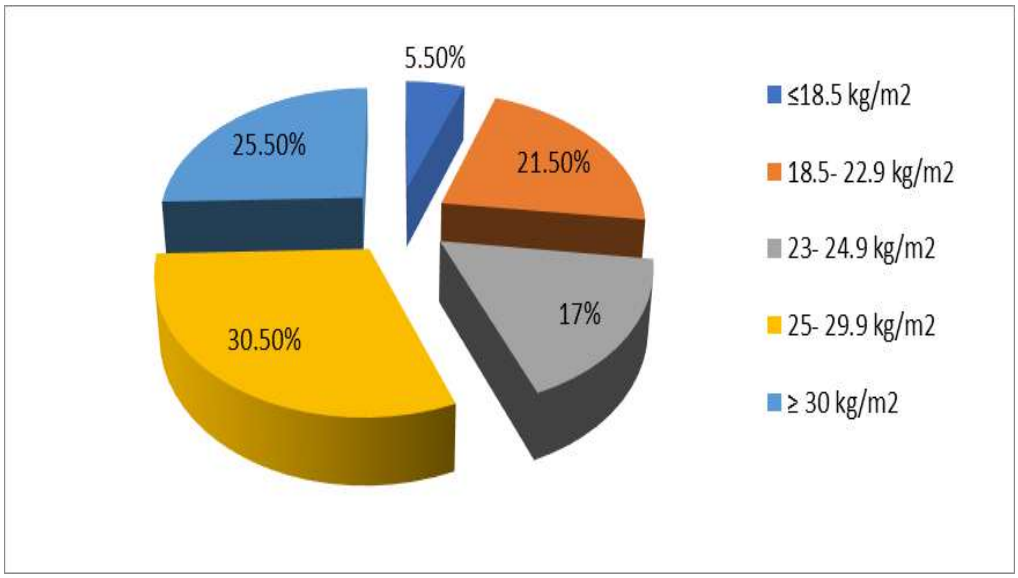


Figure 2b: WAIST CIRCUMFERENCE DISTRIBUTION OF ALL PATIENTS

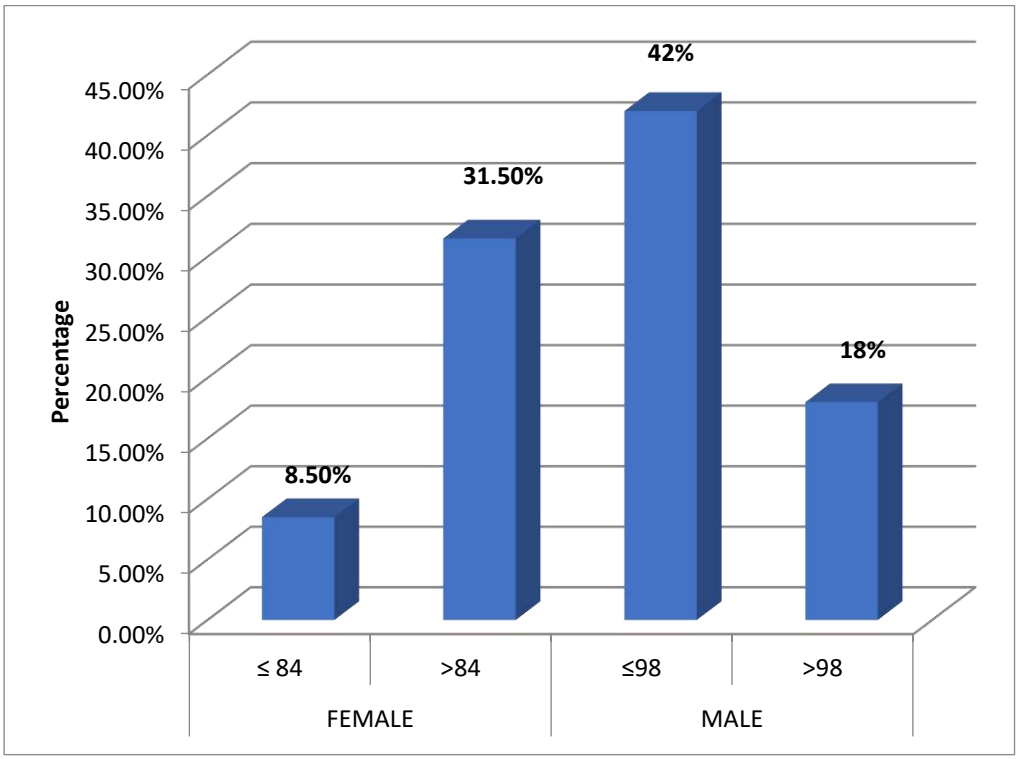


Figure 2c: MID ARM CIRCUMFERENCE DISTRIBUTION OF ALL PATIENTS

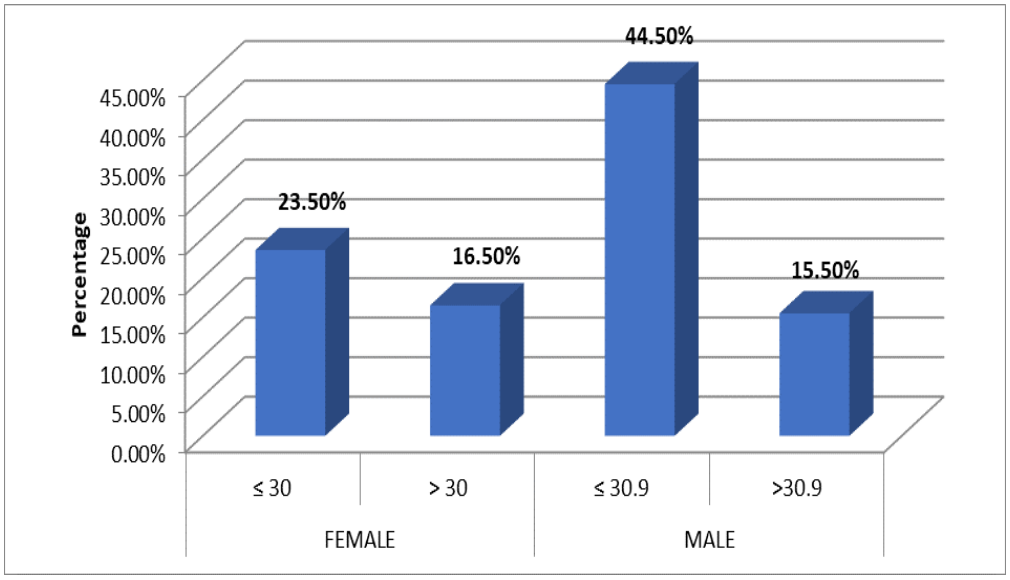


Figure 2d: SUBCUTANEOUS FAT STORES DISTRIBUTION OF ALL PATIENTS (UNDER THE EYES, BICEPS, TRICEPS)

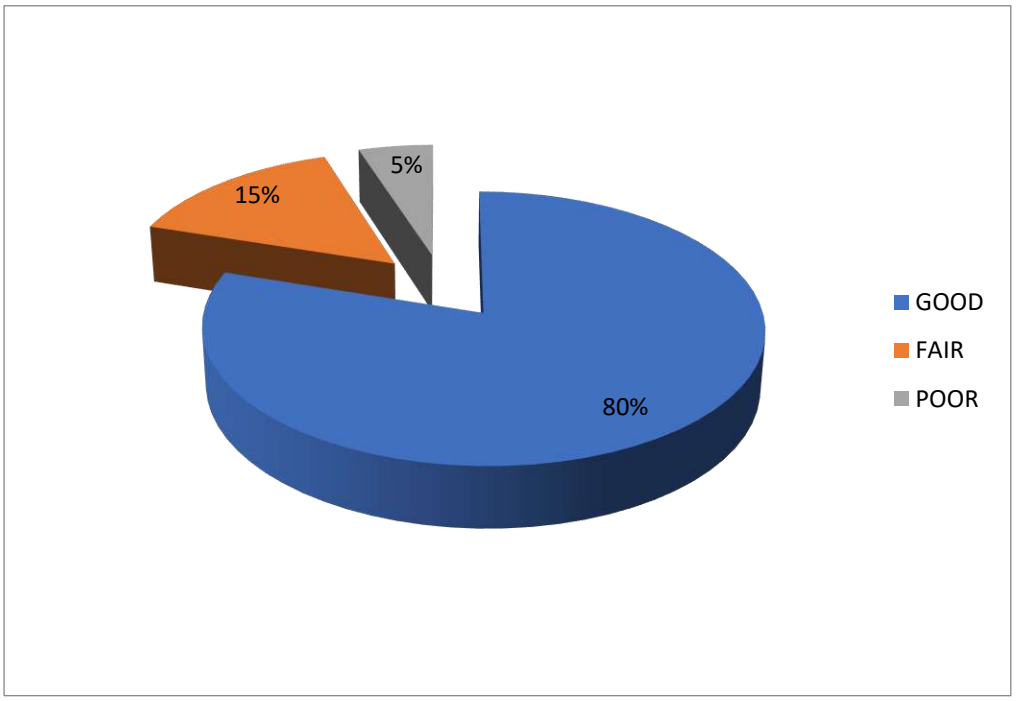
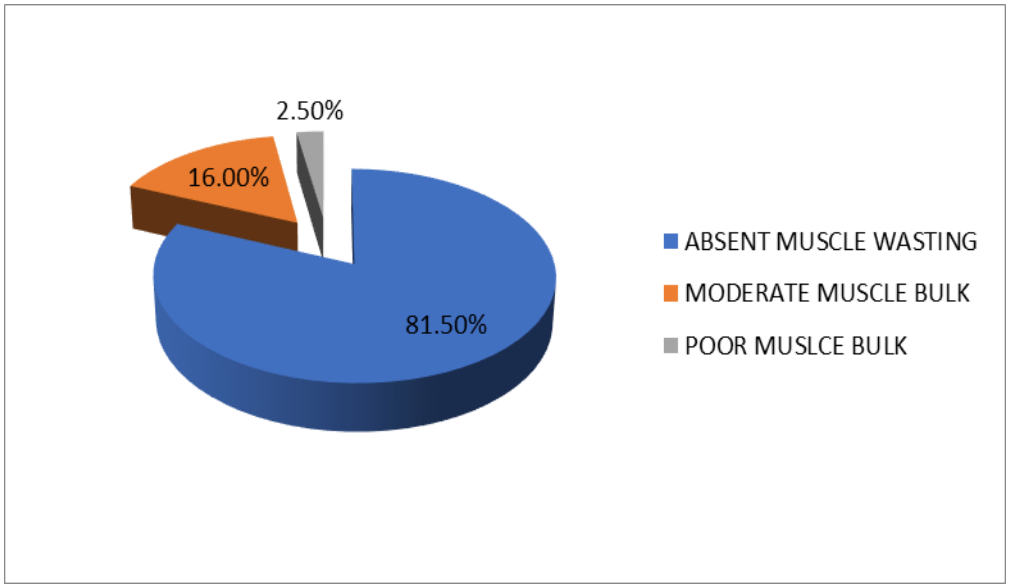


Figure 2e: MUSCLE WASTING DISTRIBUTION OF ALL PATIENTS (AT TEMPLE, CLAVICLE, SHOULDER, QUADRICEPS, CALF, KNEE)



ALCOHOLIC FATTY LIVER vs NON-ALCOHOLIC FATTY LIVER DISEASE (Table 3)

Out of the total cohort population, only 17(8.5%) patients had a history of alcohol consumption. The maximum number (n=9, 53%) of patients with alcohol consumption were in the age group 41- 60 years. The mean age of patients with a history of alcohol consumption is 52.53 ± 14.03 which demonstrated no significant difference from non-alcoholic patients.

A significant association (p-0.001) was found between alcohol consumption and male gender with all 17 alcohol consumers being male. A significant number (p-value-0.025, n=16, 94%) of patients with a history of alcohol consumption had a non-vegetarian dietary pattern.

Though no significant association (p-value- 0.513) was found between alcohol consumption and BMI but the maximum number of patients were obese (n=11, 65%) (obese class 1: n=8, 47%, obese class 2: n=3, 18%). The waist circumference and mid-arm circumference were raised in 8 (47%) and 6(35%) respectively in patients with alcohol consumption but no significant association was seen between alcohol consumption and WC or MAC. Subcutaneous fat stores were checked under the eyes, at the biceps, and triceps and were found to be good and fair in 16 (94%) and 1 (6%) patients.

The mean AST, ALT, and MCV were significantly higher in alcohol consumers than in non-alcoholics. The mean hand grip strength of the alcohol consumer cohort (34.35 ± 14.53) was significantly higher (p-value- 0.011) than that of non-alcoholics (27.27 ± 10.48) signifying sarcopenia to be more prevalent in NAFLD patients. No significant difference was seen in SPPB scores of both groups.

Table 3: ALCOHOLIC FATTY LIVER vs NON-ALCOHOLIC FATTY LIVER DISEASE

		ALCOHOL CONSUMPTION				Total	Chi-square value	p-value
		No		Yes				
AGE GROUP	< 20 years	3	2%	0	0%	3	1.673	0.796
	21-40 years	49	27%	3	18%	52		
	41-60 years	72	39%	9	53%	81		
	61-80 years	51	28%	4	24%	55		
	> 80 years	8	4%	1	6%	9		
Total		183	100%	17	100%	200		
SEX	Female	80	44%	0	0%	80	12.386	0.001
	Male	103	56%	17	100%	120		
OCCUPATION	BUSINESSMAN	36	20%	4	24%	40	45.724	0.001
	COMMISSION AGENT	1	1%	0	0%	1		
	COOPERATION JOB	1	1%	0	0%	1		
	DRIVER	2	1%	0	0%	2		
	FARMER	20	11%	10	59%	30		
	GAS PLANT WORKER	1	1%	0	0%	1		
	GOVERNMENT JOB	7	4%	1	6%	8		
	HOUSEWIFE	70	38%	0	0%	70		
	LABOURER	1	1%	0	0%	1		
	MECHANIC	1	1%	0	0%	1		
	NURSE	1	1%	0	0%	1		
	RETIRED	20	11%	0	0%	20		
	SHOPKEEPER	6	3%	1	6%	7		
	STUDENT	16	9%	0	0%	16		

		UNEMPLOYED	0	0%	1	6%	1		
CHIEF COMPLAINTS	FATIQUE	No	153	84%	15	88%	168	0.248	0.619
		Yes	30	16%	2	12%	32		
	WEAKNESS	No	144	79%	14	82%	158	0.126	0.723
		Yes	39	21%	3	18%	42		
	LETHARGY	No	175	96%	17	100%	192	0.774	0.379
		Yes	8	4%	0	0%	8		
	LOOSE STOOLS	No	140	77%	14	82%	154	0.301	0.584
		Yes	43	23%	3	18%	46		
	STIGMATA OF LIVER DISEASE	No	180	98%	17	100%	197	0.283	0.595
		Yes	3	2%	0	0%	3		
	FEVER	No	172	94%	14	82%	186	3.235	0.072
		Yes	11	6%	3	18%	14		
COMORBIDITIES	DIABETES MELLITUS	No	164	90%	17	100%	181	1.950	0.163
		Yes	19	10%	0	0%	19		
	HYPERTENSION	No	136	74%	15	88%	151	1.629	0.252
		Yes	47	26%	2	12%	49		
	HYPOTHYROIDISM	No	164	90%	17	100%	181	1.950	0.379
		Yes	19	10%	0	0%	19		
	CAD	No	179	98%	17	100%	196	0.379	0.538
		Yes	4	2%	0	0%	4		
	OTHERS		165	90%	15	88%	180	11.154	0.048
		CHRONIC AF	0	0%	1	6%	1		
		CHRONIC HEPATITIS C	1	1%	0	0%	1		
		OLD TREATED KOCH	15	8%	1	6%	16		
		POST COVID	1	1%	0	0%	1		

		PSORIASIS	1	1%	0	0%	1		
DIETARY PATTERN		VEGAN	9	5%	0	0%	9	0.875	0.349
		LACTO-OVO-VEGETARIAN	51	28%	1	6%	52	4.059	0.131
		SEMI-VEGETARIAN	1	1%	0	0%	1	0.093	0.76
		NON-VEGETARIAN	122	67%	16	94%	138	5.48	0.025
BMI GROUP		≤18.5 kg/m^2	11	6%	0	0%	11	3.274	0.513
		18.5- 22.9 kg/m^2	40	22%	3	18%	43		
		23- 24.9 kg/m^2	31	17%	3	18%	34		
		25- 29.9 kg/m^2	53	29%	8	47%	61		
		≥ 30 kg/m^2	48	26%	3	18%	51		
WAIST CIRCUMFERENCE		Males- ≤98 cm Females- ≤ 84 cm	92	50%	9	53%	101	0.044	0.833
		Males->98 cm Females-> 84 cm	91	50%	8	47%	99		
MID- ARM CIRCUMFERENCE		Males- <30.9 cm Females- <30.0 cm	125	68%	11	65%	136	0.093	0.761
		Males- >30.9 cm Females- >30.0 cm	58	32%	6	35%	64		
SUBCUTANEOUS FAT STORES	UNDER THE EYES	Good	144	79%	16	94%	160	2.422	0.294
		Fair	29	16%	1	6%	30		
		Poor	10	5%	0	0%	10		
	BICEPS	Good	144	79%	16	94%	160	2.422	0.294
		Fair	29	16%	1	6%	30		
		Poor	10	5%	0	0%	10		
	TRICEPS	Good	144	79%	16	94%	160	2.422	0.294
		Fair	29	16%	1	6%	30		
		Poor	10	5%	0	0%	10		

	ALCOHOL CONSUMPTION					
	No		Yes			
	Mean	SD	Mean	SD	t	p-value
AGE	51.36	17.04	52.53	14.03	-0.274	0.784
HR	79.24	8.63	79.24	11.01	0.002	0.998
RR	18.03	1.63	18.71	1.86	-1.608	0.109
SpO2	97.24	1.06	96.88	1.11	1.330	0.185
SBP	115.61	6.34	115.06	7.25	0.336	0.737
DBP	83.92	5.79	84.71	6.24	-0.529	0.597
BODY WEIGHT	72.50	16.61	79.41	12.75	-1.669	0.097
BMI	26.19	5.54	26.36	4.00	-0.121	0.904
WAIST CIRCUMFERENCE	94.97	11.55	99.88	10.04	-1.694	0.092
HIPCIRCUMFERENCE	96.55	10.63	99.94	8.43	-1.277	0.203
MID- ARMCIRCUMFERENCE	28.89	3.87	29.76	3.31	-0.904	0.367
BILIRUBIN(TOTAL)	0.66	0.35	0.83	0.29	-1.908	0.058
BILIRUBIN(DIRECT)	0.30	0.26	0.40	0.23	-1.545	0.124
AST	18.77	11.67	27.06	22.61	-2.534	0.012
ALT	39.16	23.04	61.94	46.30	-3.494	0.001
ALP	96.56	38.16	85.00	32.47	1.209	0.228
TOTALPROTEINS	6.64	0.84	6.57	1.00	0.324	0.746
ALBUMIN	3.70	0.64	3.85	0.72	-0.896	0.371
INR	1.26	0.17	1.32	0.13	-1.503	0.134
TRIGLYCERIDES	141.67	34.47	153.24	57.28	-1.238	0.217
CHOLESTEROL	170.85	29.95	164.06	26.92	0.901	0.369

HDLCHOLESTEROL	55.61	12.43	55.71	19.48	-0.029	0.977
LDLCHOLESTEROL	101.58	31.72	100.41	27.72	0.147	0.884
TLC	9.32	3.39	7.70	2.82	1.909	0.058
NEUTROPHILS	71.97	13.51	68.37	11.29	1.065	0.288
LYMPHOCYTES	19.50	11.92	20.48	10.34	-0.327	0.744
MONOCYTES	6.46	2.98	7.29	2.57	-1.120	0.264
EOSINOPHILS	1.45	1.91	1.22	1.14	0.471	0.638
BASOPHILS	0.30	0.37	0.33	0.27	-0.370	0.712
HB	12.00	1.95	12.26	1.79	-0.539	0.590
MCV	86.76	9.08	91.45	5.11	-2.098	0.037
PLATELETCOUNT	261.89	74.19	276.82	86.76	-0.783	0.435
UREA	33.93	17.60	31.24	18.48	0.602	0.548
CREATININE	1.04	0.51	0.93	0.30	0.881	0.379
NA+	137.80	4.19	139.12	3.30	-1.257	0.210
K+	4.27	0.45	4.34	0.36	-0.666	0.506
CL-	99.71	6.91	100.06	5.02	-0.203	0.839
FBS	99.08	17.20	101.41	17.04	-0.536	0.593
RBS	108.37	28.44	107.24	11.48	0.163	0.871
HB1Ac	5.45	1.23	5.49	0.57	-0.132	0.895
HEPATIC STEATOSISINDEX (HSI)	45.24	6.88	45.38	5.44	-0.078	0.938
APRI	0.20	0.13	0.26	0.19	-1.746	0.082
FIB-4SCORE	0.61	0.32	0.63	0.31	-0.290	0.772
BARDSCORE	0.41	0.51	0.35	0.49	0.437	0.662
NAFLDSCORE	-2.68	1.35	-2.77	1.29	0.248	0.804

SARC-F SCORE	1.21	1.36	0.71	1.21	1.483	0.140
SKELETAL MUSCLEINDEX (SMI)	0.95	0.24	1.11	0.09	-2.686	0.008
HAND GRIP STRENGTH	27.27	10.48	34.35	14.53	-2.570	0.011
SPPB SCORE	8.89	1.98	9.41	1.54	-1.056	0.292

Figure 3a. AGE DISTRIBUTION OF NON-ALCOHOLIC AND ALCOHOL CONSUMER

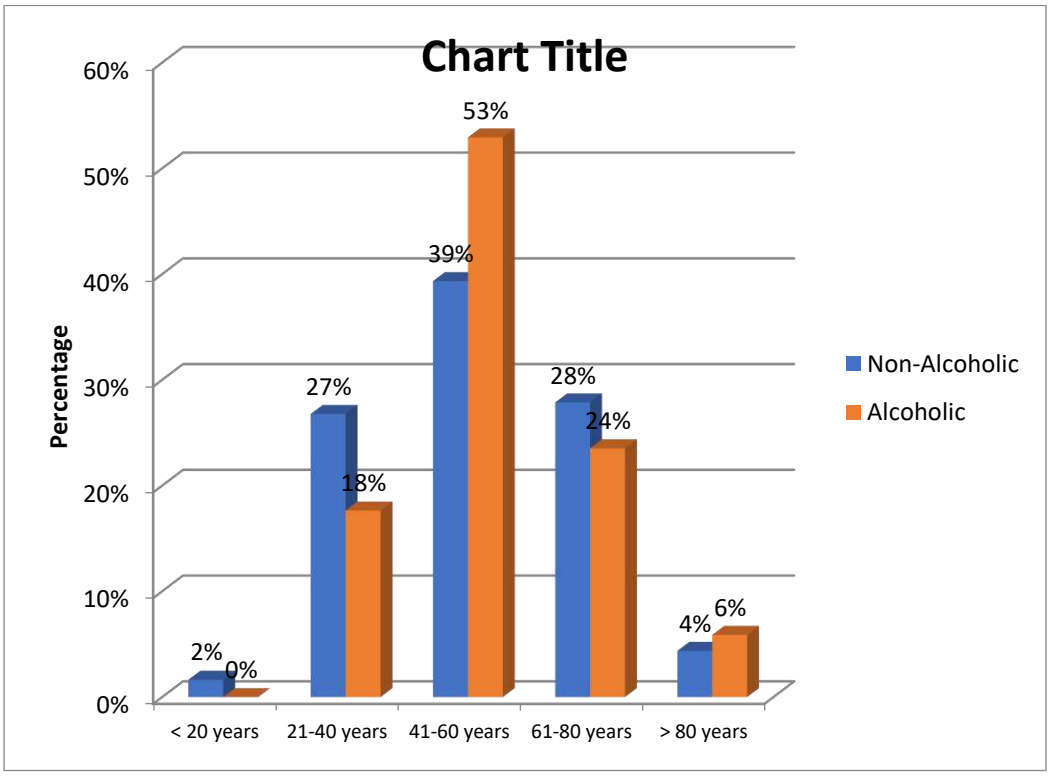


Figure 3b: GENDER DISTRIBUTION OF NON-ALCOHOLIC AND ALCOHOL CONSUMER

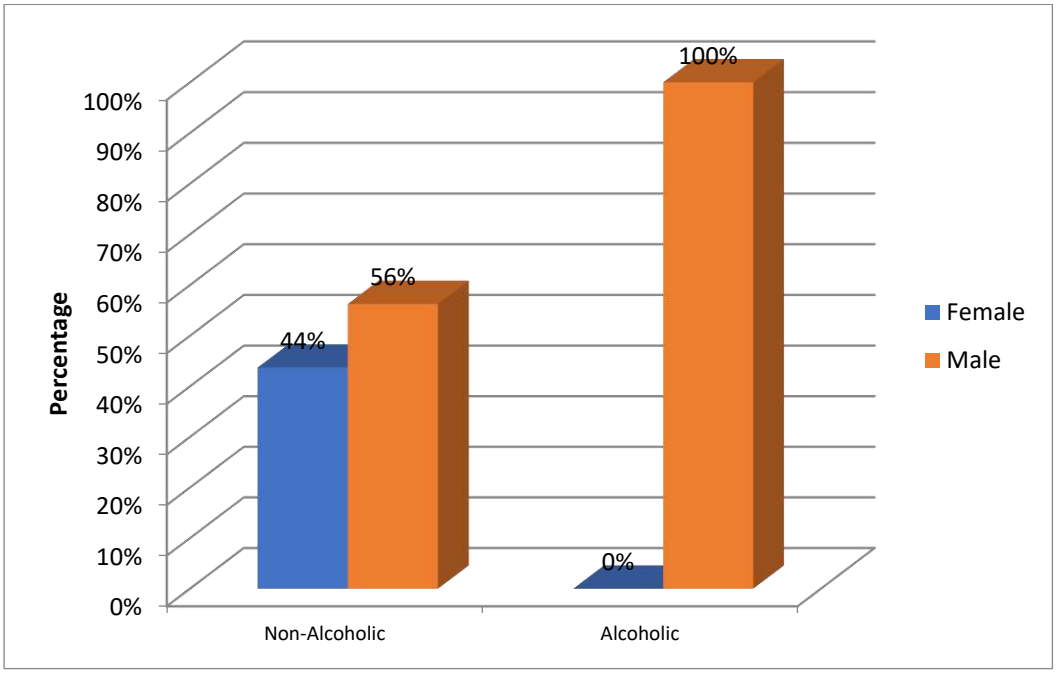


Figure 3c: BMI DISTRIBUTION OF NON-ALCOHOLIC AND ALCOHOL CONSUMER

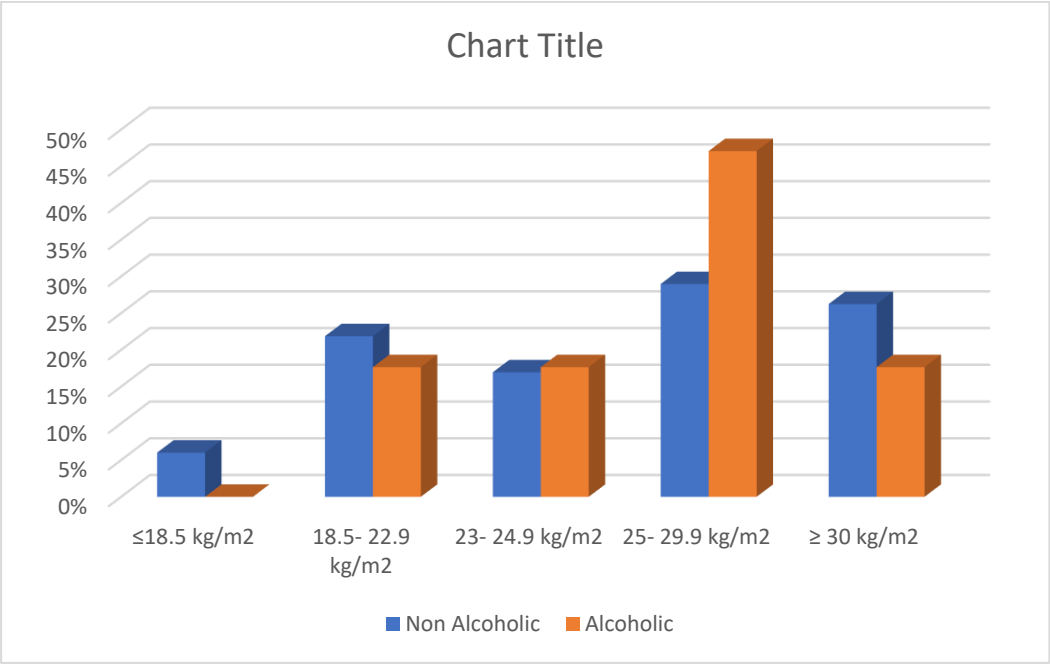
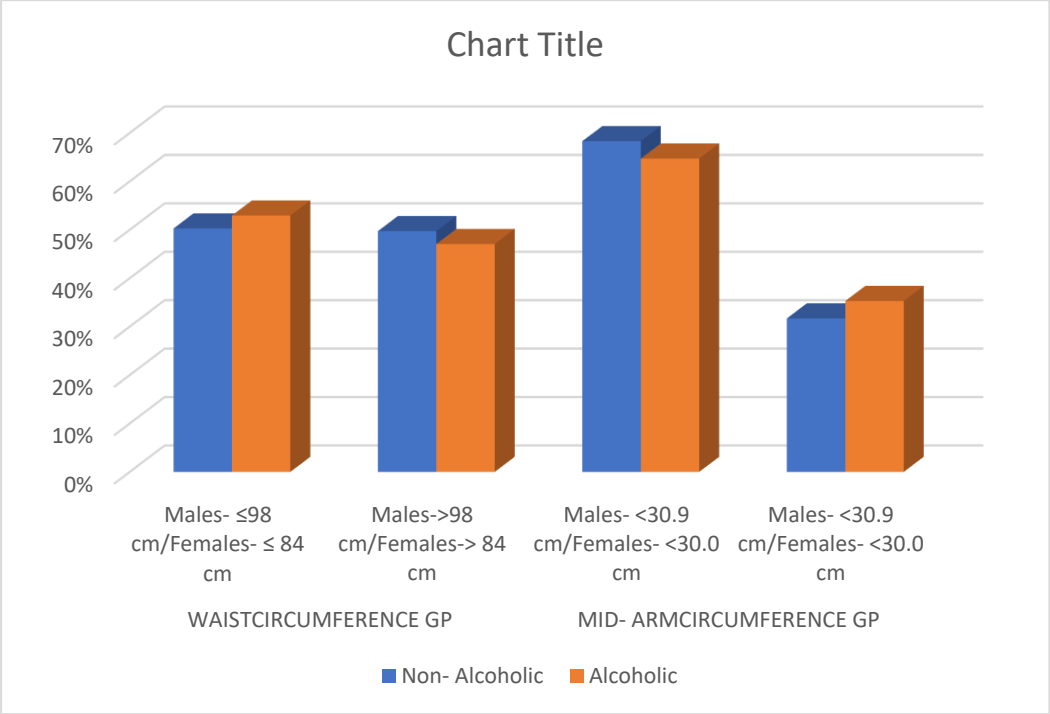


Figure 3d: WAIST CIRCUMFERENCE AND MID ARM CIRCUMFERENCE DISTRIBUTION OF NON-ALCOHOLIC AND ALCOHOL CONSUMER



SARCOPENIA ASSESSMENT

The various methods used in our study for the assessment of sarcopenia were SARC-F (as a screening tool), Skeletal Muscle Index (for skeletal muscle mass), Hand Grip Strength (for skeletal muscle strength), and Short Physical Performance Battery test (for skeletal muscle performance).

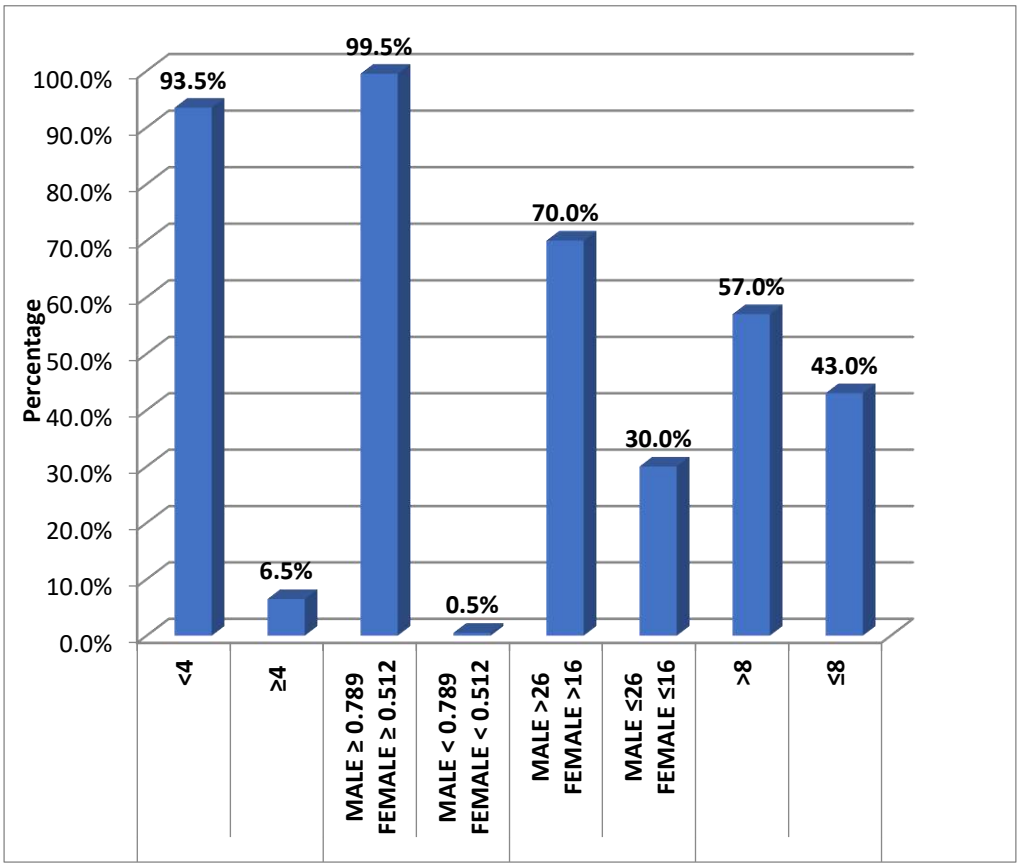
Table 4 – PREVALENCE OF SARCOPENIA BASED ON VARIOUS PARAMETERS

		No. of cases	Percentage	Min.	Max.	Mean	Std. Deviation
SARC-F	<4	187	93.5%	0.00	6.00	1.17	1.35
	≥4	13	6.5%				
	Total	200	100.0%				
		No. of cases	Percentage				
SMI	Male ≥ 0.789 Female ≥ 0.512	199	99.5%	0.54	1.99	0.97	0.24
	Male < 0.789 Female < 0.512	1	0.5%				
	Total	200	100.0%				
		No. of cases	Percentage				
HAND GRIP STRENGTH	Male >26 Female >16	140	70.0%	6.00	66.00	27.88	11.02
	Male ≤26 Female ≤16	60	30.0%				
	Total	200	100.0%				
		No. of cases	Percentage				
SPPB	>8	114	57.0%	2.00	12.00	8.94	1.95
	≤8	86	43.0%				
	Total	200	100.0%				

		Possible Sarcopenia				
		N	P	Total	Kappa value	p-value
SARC-F	N	85	102	187		
	P	0	13	13	0.098	0.001
HAND GRIP STRENGTH	N	85	55	140		
	P	0	60	60	0.481	0.001
SMI	N	84	115	199		
	P	1	0	1	-0.010	0.244
SPPB	N	85	29	114		
	P	0	86	86		
Total		85	115	200	0.716	0.001

	Statistic	Sensitivity	Specificity	Negative Likelihood Ratio	Disease prevalence (*)	Positive Predictive Value (*)	Negative Predictive Value (*)	Accuracy (*)
SARC-F	Value	11.30%	100.00%	0.89	57.50%	100.00%	45.45%	49.00%
	95% CI	6.16% to 18.55%	95.75% to 100.00%	0.83 to 0.95	50.33% to 64.44%		43.84% to 47.08%	41.88% to 56.15%
HAND GRIP STRENGTH	Value	52.17%	100.00%	0.48	57.50%	100.00%	60.71%	72.50%
	95% CI	42.66% to 61.57%	95.75% to 100.00%	0.40 to 0.58	50.33% to 64.44%		56.08% to 65.16%	65.76% to 78.56%
SMI	Value	0.00%	98.82%	1.01	57.50%	0.00%	42.21%	42.00%
	95% CI	0.00% to 3.16%	93.62% to 99.97%	0.99 to 1.04	50.33% to 64.44%		41.65% to 42.78%	35.07% to 49.17%
SPPB	Value	74.78%	100.00%	0.25	57.50%	100.00%	74.56%	85.50%
	95% CI	65.83% to 82.42%	95.75% to 100.00%	0.18 to 0.35	50.33% to 64.44%		68.15% to 80.06%	79.84% to 90.07%

Figure 4: SARCOPENIA PREVALENCE USING DIFFERENT PARAMETERS



SARC-F (Table 5)

The screening tool used for sarcopenia assessment in our study was SARC-F with the criteria of a score of ≥ 4 out of 10 for diagnosis of sarcopenia. Out of 200, 13 patients (6.5%) were found to have a score of ≥4. The cases found to have sarcopenia as per the SARC-F were significantly associated with age (chi-square- 39.64, p-value- 0.001). The maximum number of sarcopenic patients (n=9, 69.3%) were above 60 years of age as compared to only 29.4 % (n=55) of non-sarcopenic patients being above 60 years of age. Out of these 9 sarcopenic patients, 5 (38.5%) were above 80 years of age. The mean age of sarcopenic patients was 67.23 ± 22.38 years which was significantly greater (p-value- 0.001) than the mean age of 50.36 ± 15.82 years of non-sarcopenic patients. This association in our study is in concordance with the conventional age-related definition of sarcopenia.

Out of 13 sarcopenic patients, 7 (53.8%) were female and 6 (46.2%) were male and showed no significant association with gender (p-value- 0.292). Among the 13 sarcopenic patients, 3 (23.1%) were diabetic, 5 (38.5%) were hypertensives, 3 (23.1%) had hypothyroidism and 2 (15.4%) had coronary artery disease. A significant association was found between high SARC-F and CAD (p-value- 0.22) with no other comorbidity showing a significant association.

Only one patient (7.7%) had a history of alcohol consumption with no significant association. The predominant dietary pattern of the patients with sarcopenia was non-vegetarian (n= 7, 53.8%) followed by lacto-ovo-vegetarian (n=5, 38.5%).

Among patients with high SARC-F, the maximum number of patients were obese (n=9, 69.3%) according to the Asian classification of BMI (obese class 1: n=5, 38.5%, obese class 2: n=4, 30.8%). The mean BMI was 27.40 ± 6.17 kg/m^2 which was slightly higher than non-sarcopenic patients (26.12 ± 5.37 kg/m^2). No significant association (p-value- 0.77) was found between BMI and high SARC-F.

The mean waist circumference of the sarcopenic patients was 97 ± 15.22 cm which was greater than the non-sarcopenic group (95.28 ± 11.23) but no significant association was found between WC and sarcopenia

(p-value- 0.803). Only 6 (46.2%) patients had WC above the gender-specific criteria used in our study (males: >98 cm, females: >84 cm)

The mid-arm circumference was not significantly associated with sarcopenia (p-value- 0.606) with the mean MAC of the sarcopenic group being 29.46 ± 4.54 cm as compared to a mean of 28.93 ± 3.78 cm in the non-sarcopenic group. Only 5 (38.5%) patients had a high mid-arm circumference.

There was no significant association between sarcopenia and the presence of subcutaneous fat stores (p-value- 0.604) and muscle wasting (p-value- 0.564). Subcutaneous fat stores were good, fair, and poor in 9 (69.2%), 3 (23.1%), and 1 (7.7%) patients. Out of 13 sarcopenic patients, 12 (92.3%) had no muscle wasting with only one patient (7.7%) having moderate muscle bulk

Among the 13 sarcopenic patients, on ultrasonography, fatty liver was grade I,

II, and III in 5(38.5%), 8(61.5%), and 0(0%) patients thus showing no significant correlation between the severity of grade of fatty liver and sarcopenia (p-0.314).

Out of the thirteen patients found to have sarcopenia in accordance with the SARC-F scoring system, 7 (53.8%) had poor muscle strength (hand grip strength) and 12 (92.3%) had poor muscle performance (SPPB test).

SARC-F was found to have a high specificity (100%) and positive predictive value (100%) but a low sensitivity (11.30%) and negative predictive value (45.45%) when possible sarcopenia according to the Asian Working Group for Sarcopenia criteria, is kept as the gold standard for sarcopenia diagnosis. The accuracy of the test was 49%.

Table 5: SARCOPENIA ASSESSMENT ACCORDING TO SARC-F

			SARC-F				Total	Chi-square value	p-value
			<4		≥4				
AGE GROUP		< 20 years	3	1.6%	0	0.0%	3	39.64	0.001
		21-40 years	49	26.2%	3	23.1%	52		
		41-60 years	80	42.8%	1	7.7%	81		
		61-80 years	51	27.3%	4	30.8%	55		
		> 80 years	4	2.1%	5	38.5%	9		
		Total	187	100.0%	13	100.0%	200		
SEX		Female	73	39.0%	7	53.8%	80	1.11	0.292
		Male	114	61.0%	6	46.2%	120		
CHIEF COMPLAINTS	**FATIQUE**	No	159	85.0%	9	69.2%	168	2.257	0.133
		Yes	28	15.0%	4	30.8%	32		
	WEAKNESS	No	152	81.3%	6	46.2%	158	9.042	0.003
		Yes	35	18.7%	7	53.8%	42		
	LETHARGY	No	179	95.7%	13	100.0%	192	0.579	0.447
		Yes	8	4.3%	0	0.0%	8		
	LOOSE STOOLS	No	143	76.5%	11	84.6%	154	0.455	0.500
		Yes	44	23.5%	2	15.4%	46		
	STIGMATA OF LIVER DISEASE	No	184	98.4%	13	100.0%	197	0.212	0.645
		Yes	3	1.6%	0	0.0%	3		
	FEVER	No	175	93.6%	11	84.6%	186	1.501	0.220
		Yes	12	6.4%	2	15.4%	14		
COMORBIDITES		No	171	91.4%	10	76.9%	181	2.981	0.084

	DIABETES MELLITUS	Yes	16	8.6%	3	23.1%	19		
	HYPERTENSION	No	143	76.5%	8	61.5%	151	1.465	0.226
		Yes	44	23.5%	5	38.5%	49		
	BRONCHIAL ASTHMA	No	187	100.0%	13	100.0%	200		
	HYPOTHYROIDISM	No	171	91.4%	10	76.9%	181	2.981	0.084
		Yes	16	8.6%	3	23.1%	19		
	CAD	No	185	98.9%	11	84.6%	196	12.708	0.022
		Yes	2	1.1%	2	15.4%	4		
	OTHERS							4.493	0.481
		CHRONIC AF	1	0.5%	0	0.0%	1		
		CHRONIC HEPATITIS C	1	0.5%	0	0.0%	1		
		OLD TREATED KOCH	13	7.0%	3	23.1%	16		
		POST COVID	1	0.5%	0	0.0%	1		
		PSOARIASIS	1	0.5%	0	0.0%	1		
Total			187	100.0%	13	100.0%	200		
ALCOHOL		N0	171	91.4%	12	92.3%	183	0.012	0.914
		Yes	16	8.6%	1	7.7%	17		
Total			187	100.0%	13	100.0%	200		
DIETARY PATTERN		**VEGAN**	8	4.3%	1	7.7%	9	0.33	0.566
		LACTO-OVO-VEGETARIAN	47	25.1%	5	38.5%	52	1.171	0.557
		PESCO-VEGETARIAN	0	0.0%	0	0.0%	0		
		SEMI-VEGETARIAN	1	0.5%	0	0.0%	1	0.07	0.792
		NON-VEGETARIAN	131	70.1%	7	53.8%	138	1.493	0.222

BMI GROUP		≤18.5 kg/m^2	10	5.3%	1	7.7%	11	1.816	0.77
		18.5- 22.9 kg/m^2	42	22.5%	1	7.7%	43		
		23- 24.9 kg/m^2	32	17.1%	2	15.4%	34		
		25- 29.9 kg/m^2	56	29.9%	5	38.5%	61		
		≥ 30 kg/m^2	47	25.1%	4	30.8%	51		
Total			187	100.0%	13	100.0%	200		
WAIST CIRCUMFERENCE GP		Males- ≤98 cm Females- ≤ 84 cm	94	50.3%	7	53.8%	101	0.062	0.803
		Males->98 cm Females-> 84 cm	93	49.7%	6	46.2%	99		
Total			187	100.0%	13	100.0%	200		
MID- ARM CIRCUMFERENCE GP		Males- <30.9 cm Females- <30.0 cm	128	68.4%	8	61.5%	136	0.267	0.606
		Males- ≥30.9 cm Females- ≥30.0 cm	59	31.6%	5	38.5%	64		
Total			187	100.0%	13	100.0%	200		
SUBCUTANEOUS FAT STORES	**UNDER THE EYES**	Good	151	80.7%	9	69.2%	160	1.008	0.604
		Fair	27	14.4%	3	23.1%	30		
		Poor	9	4.8%	1	7.7%	10		
	BICEPS	Good	151	80.7%	9	69.2%	160	1.008	0.604
		Fair	27	14.4%	3	23.1%	30		
		Poor	9	4.8%	1	7.7%	10		
	TRICEPS	Good	151	80.7%	9	69.2%	160	1.008	0.604
		Fair	27	14.4%	3	23.1%	30		
		Poor	9	4.8%	1	7.7%	10		
MUSCLE WASTING	**TEMPLE**	Absent	151	80.7%	12	92.3%	163	1.147	0.564
		Moderate	31	16.6%	1	7.7%	32		

		Poor	5	2.7%	0	0.0%	5		
	CLAVICLE	Absent	151	80.7%	12	92.3%	163	1.147	0.564
		Moderate	31	16.6%	1	7.7%	32		
		Poor	5	2.7%	0	0.0%	5		
	SHOULDER	Absent	151	80.7%	12	92.3%	163	1.147	0.564
		Moderate	31	16.6%	1	7.7%	32		
		Poor	5	2.7%	0	0.0%	5		
	QUADRICEPS	Absent	151	80.7%	12	92.3%	163	1.147	0.564
		Moderate	31	16.6%	1	7.7%	32		
		Poor	5	2.7%	0	0.0%	5		
	CALF	Absent	151	80.7%	12	92.3%	163	1.147	0.564
		Moderate	31	16.6%	1	7.7%	32		
		Poor	5	2.7%	0	0.0%	5		
	KNEE	Absent	151	80.7%	12	92.3%	163	1.147	0.564
		Moderate	31	16.6%	1	7.7%	32		
		Poor	5	2.7%	0	0.0%	5		
GRADE OF FATTY LIVER		**1**	79	42.2%	5	38.5%	84	2.317	0.314
		2	85	45.5%	8	61.5%	93		
		3	23	12.3%	0	0.0%	23		
Total			187	100.0%	13	100.0%	200		
SMI		**Males- ≥0.789 Females- ≥0.512**	186	99.5%	13	100.0%	199	0.070	0.792
		Males- >0.789 Females- >0.512	1	0.5%	0	0.0%	1		
Total			187	100.0%	13	100.0%	200		
HAND GRIP STRENGTH		**Males- >26**	134	71.7%	6	46.2%	140	3.765	0.064

	Females- >16							
	Males- ≤26 Females- ≤16	53	28.3%	7	53.8%	60		
Total		187	100.0%	13	100.0%	200		
SPPB	**>8**	113	60.4%	1	7.7%	114	13.792	0.001
	≤8	74	39.6%	12	92.3%	86		
Total		187	100.0%	13	100.0%	200		

SARC-F	<4		≥4			
	Mean	SD	Mean	SD	t	p-value
AGE	50.36	15.82	67.23	22.38	-3.608	0.000
BODY WEIGHT	72.95	16.40	75.06	17.08	-0.447	0.655
HEIGHT	1.67	0.08	1.66	0.11	0.509	0.611
BMI	26.12	5.37	27.40	6.17	-0.825	0.411
WAISTCIRCUMFERENCE	95.28	11.23	97.00	15.22	-0.522	0.602
HIPCIRCUMFERENCE	96.68	10.14	99.15	14.96	-0.822	0.412
MID- ARMCIRCUMFERENCE GP	28.93	3.78	29.46	4.54	-0.211	0.833

Figure 5a: AGE DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SARC-F

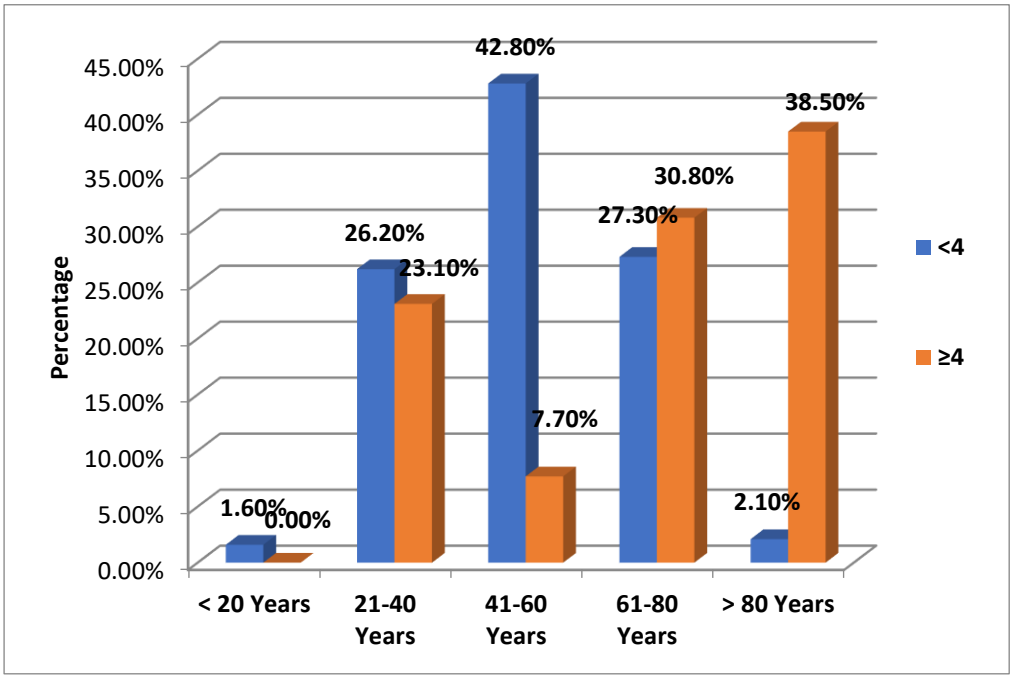


Figure 5b: GENDER DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SARC-F

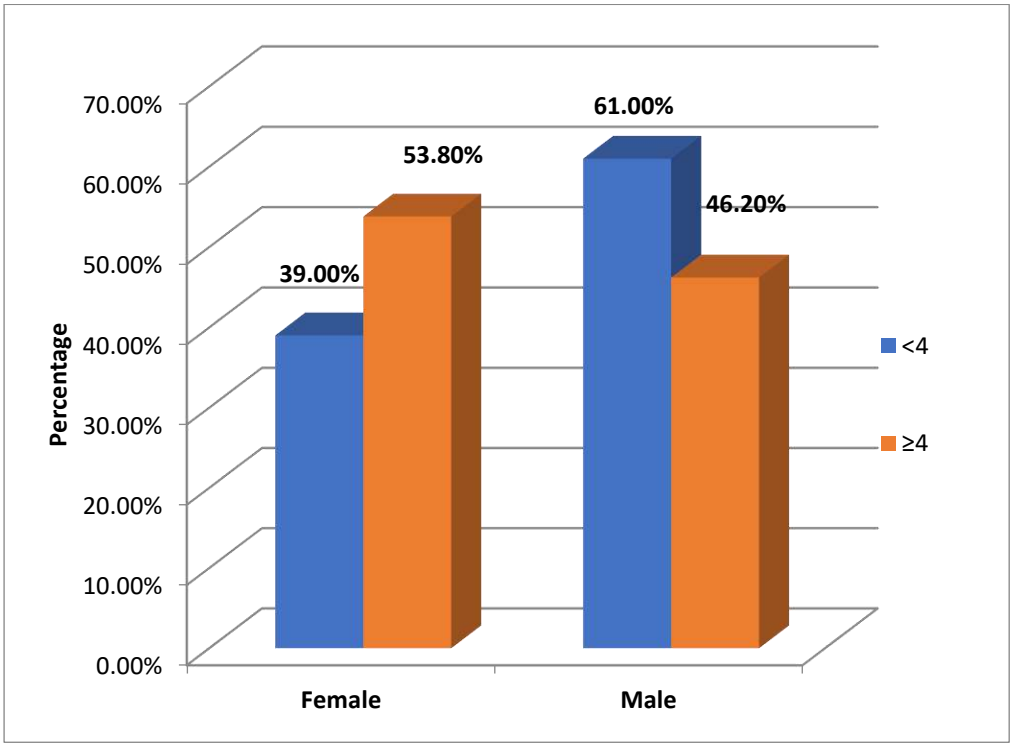


Figure 5c: COMORBIDITIES DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SARC-F

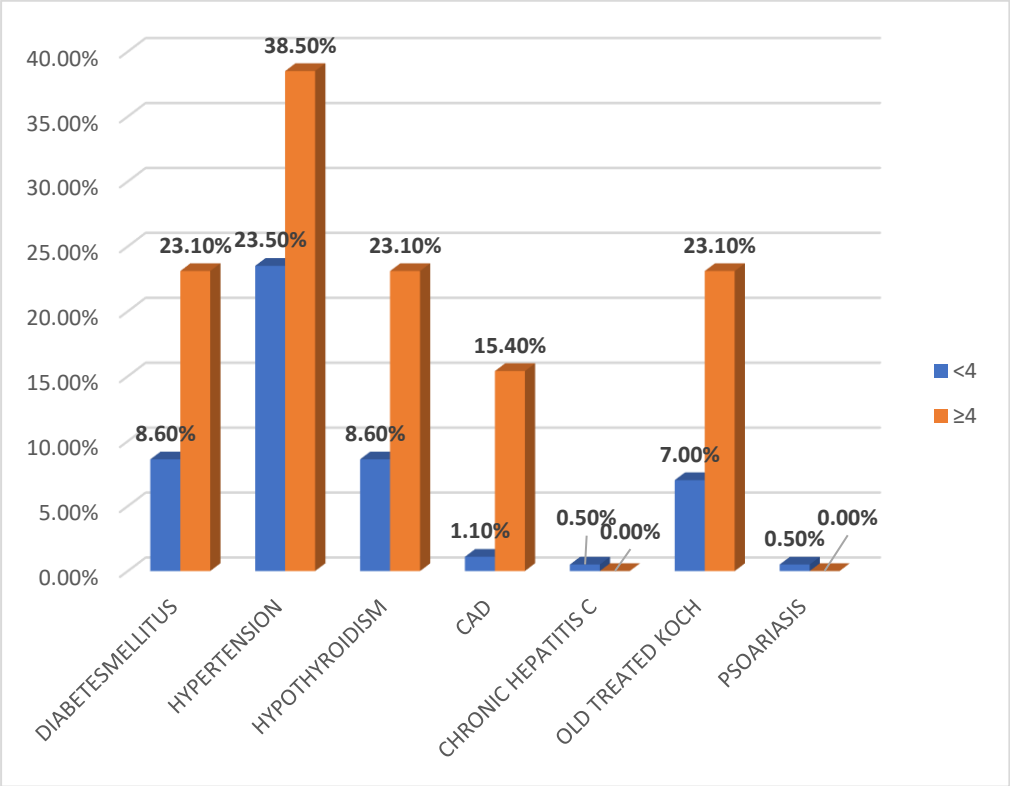


Figure 5d: ALCOHOL CONSUMPTION DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SARC-F

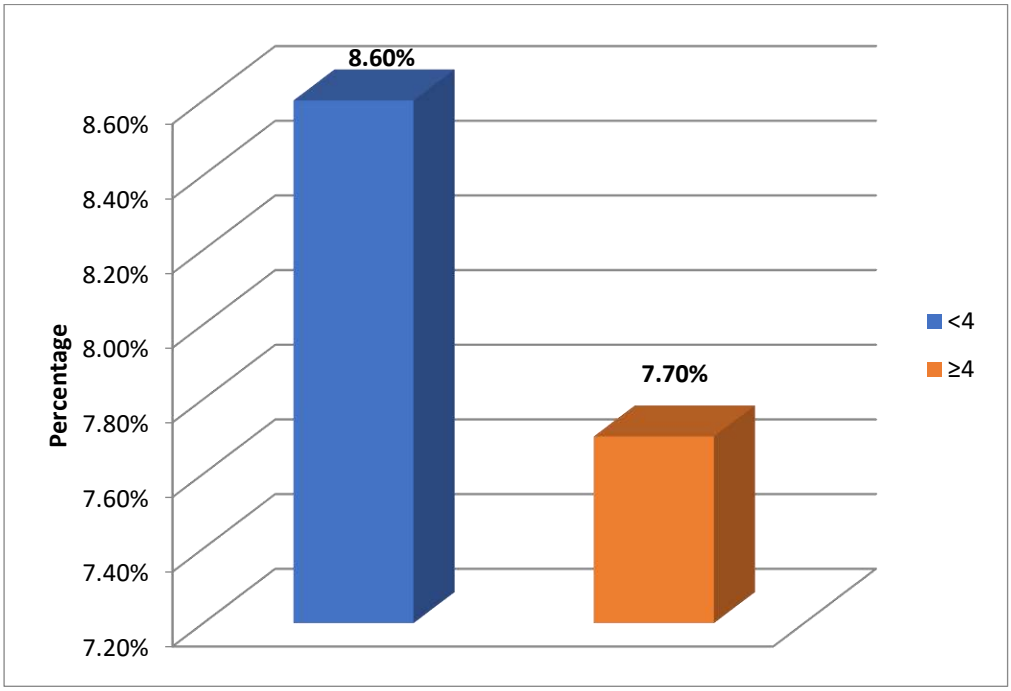


Figure 5e: DIETARY PATTERN DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SARC-F

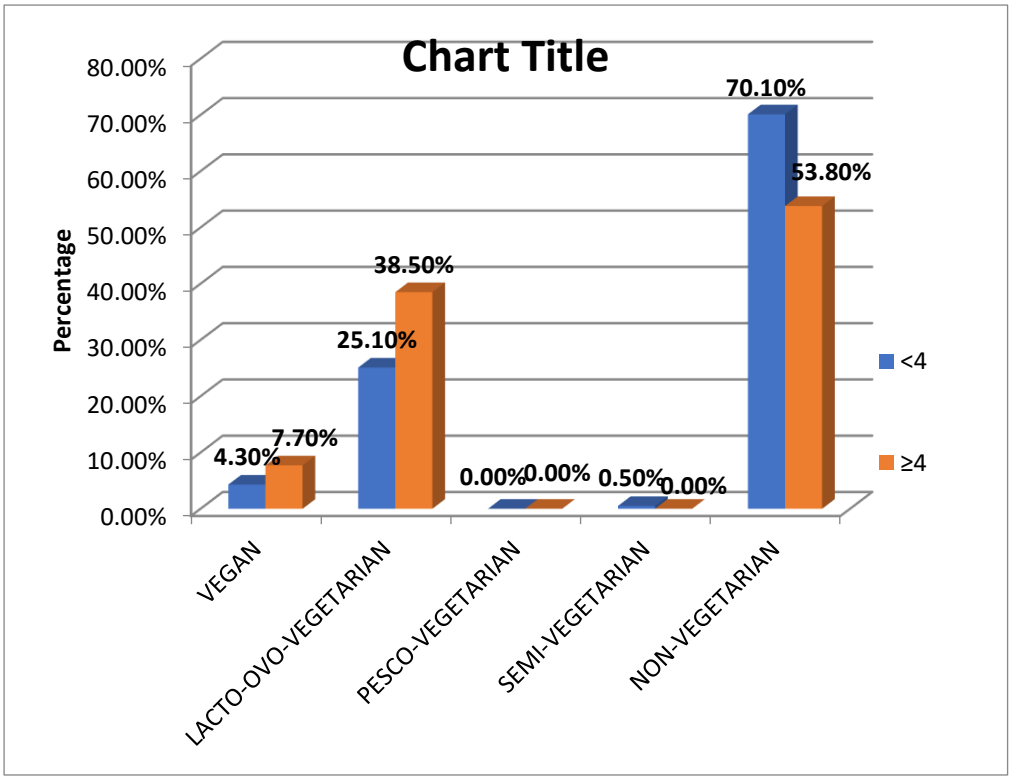


Figure 5f: BMI DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS (ACCORDING TO SARC-F) ACCORDING TO ASIAN CLASSIFICATION

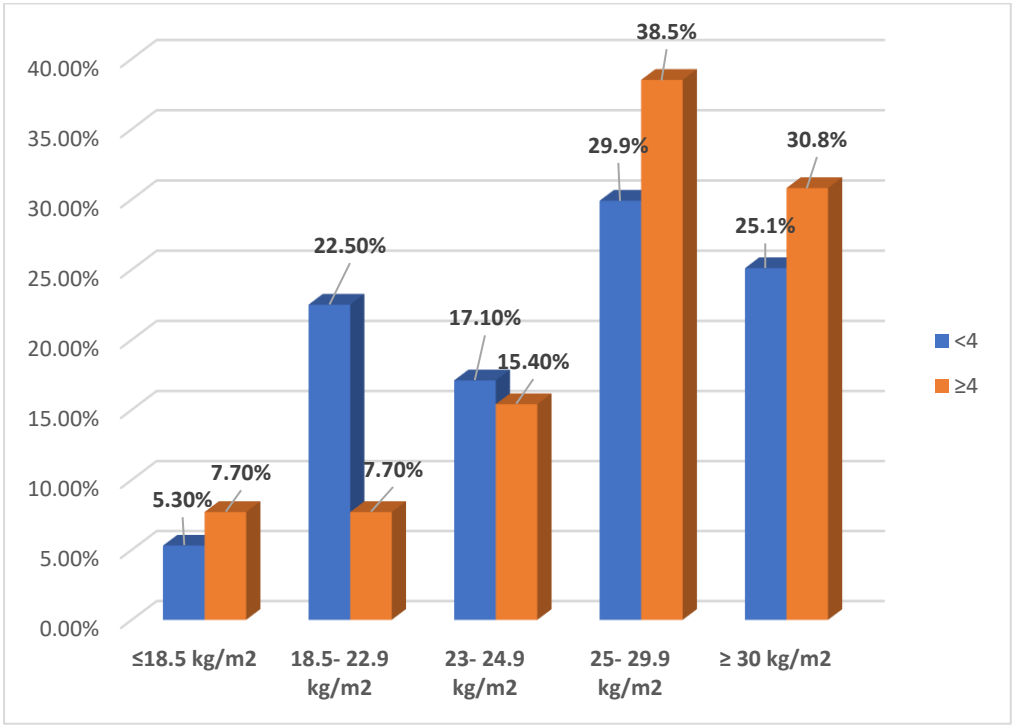


Figure 5g: WAIST CIRCUMFERENCE DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SARC-F

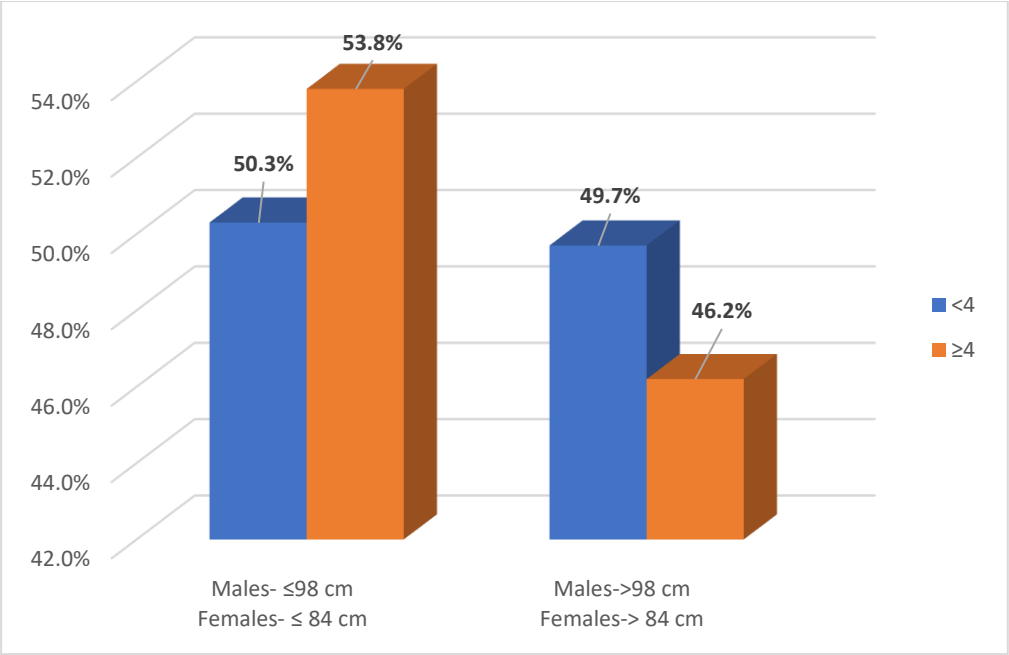


Figure 5h: MID ARM CIRCUMFERENCE DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SARC-F

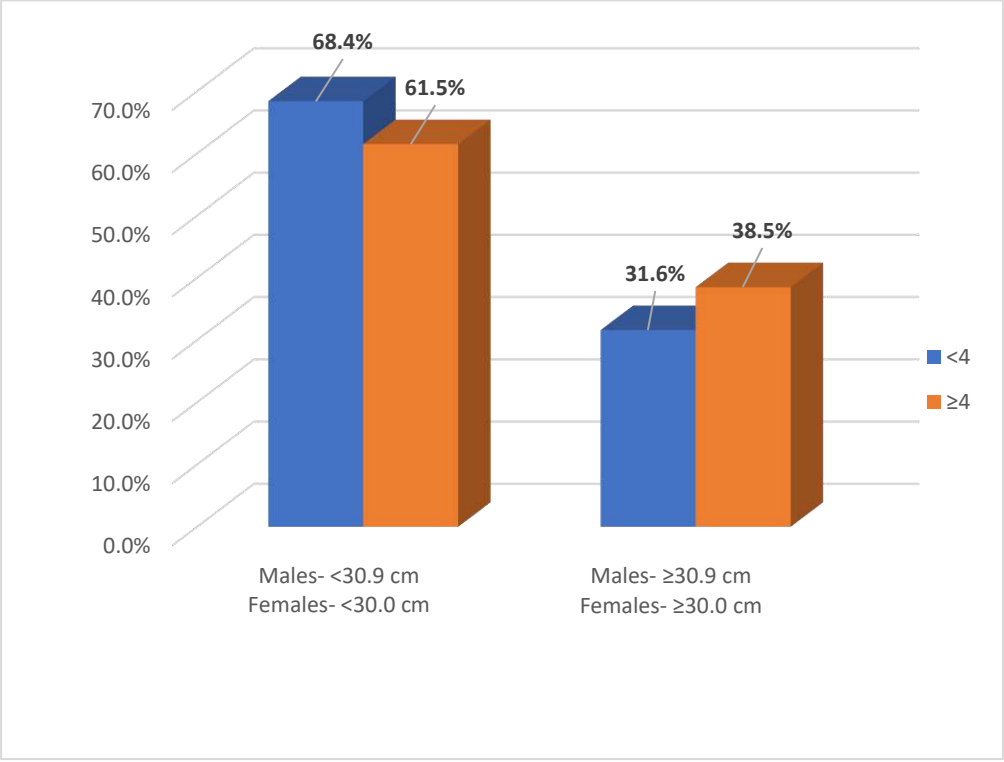


Figure 5i: SUBCUTANEOUS FAT STORES AND MUSCLE WASTING DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SARC-F

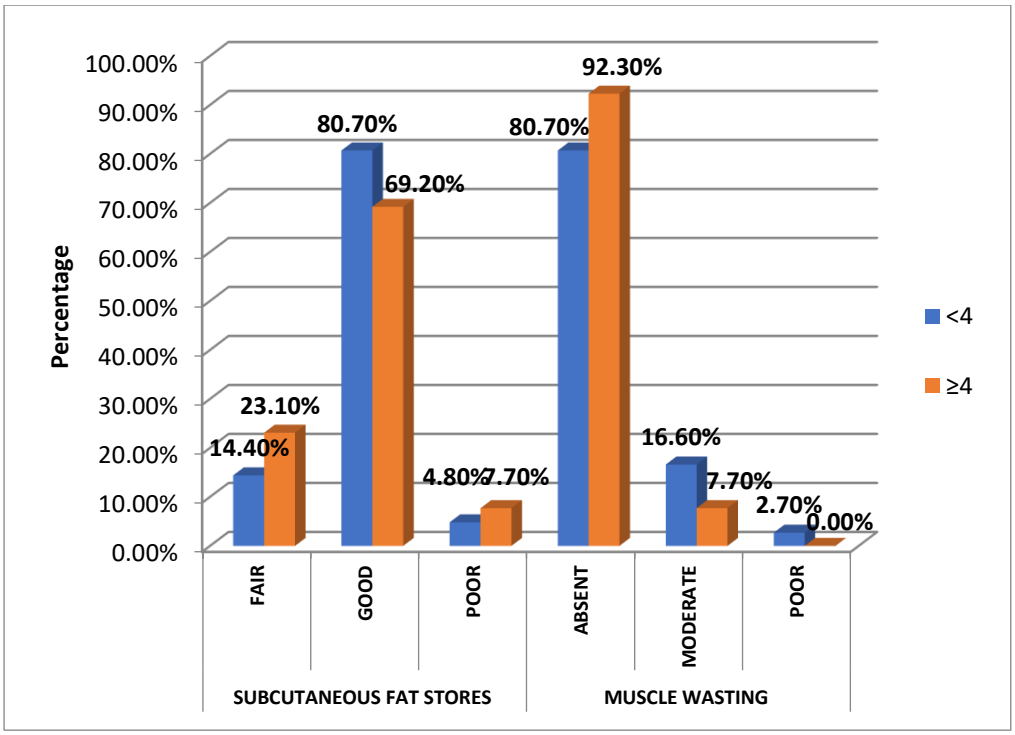


Figure 5j: GRADING OF FATTY LIVER DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SARC-F

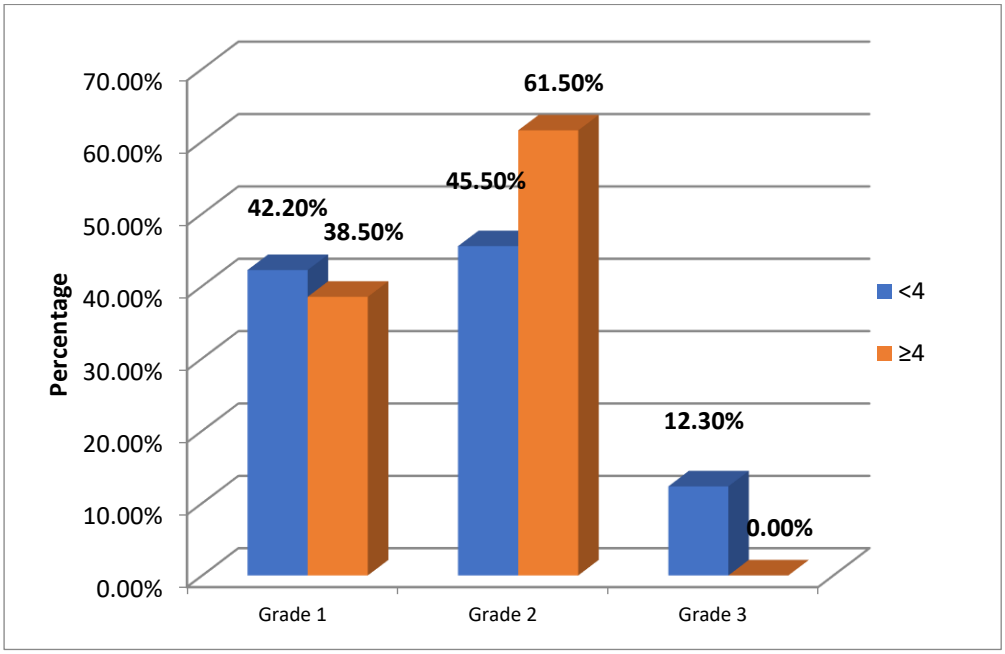


Figure 5k: HAND-GRIP STRENGTH PATTERN IN NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SARC-F

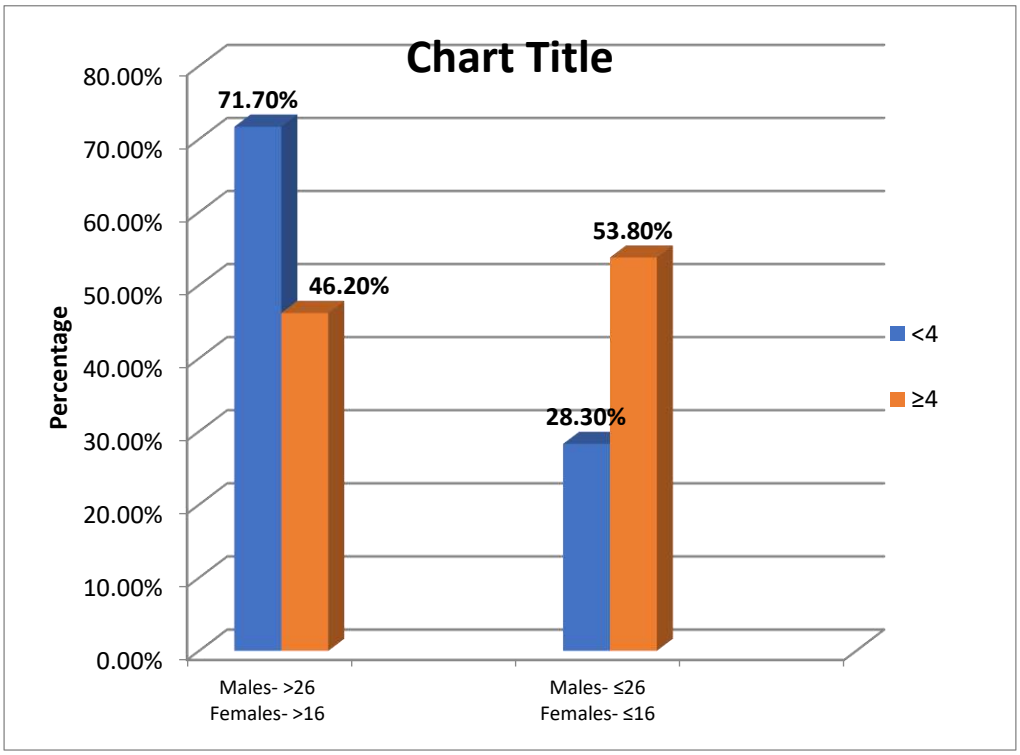
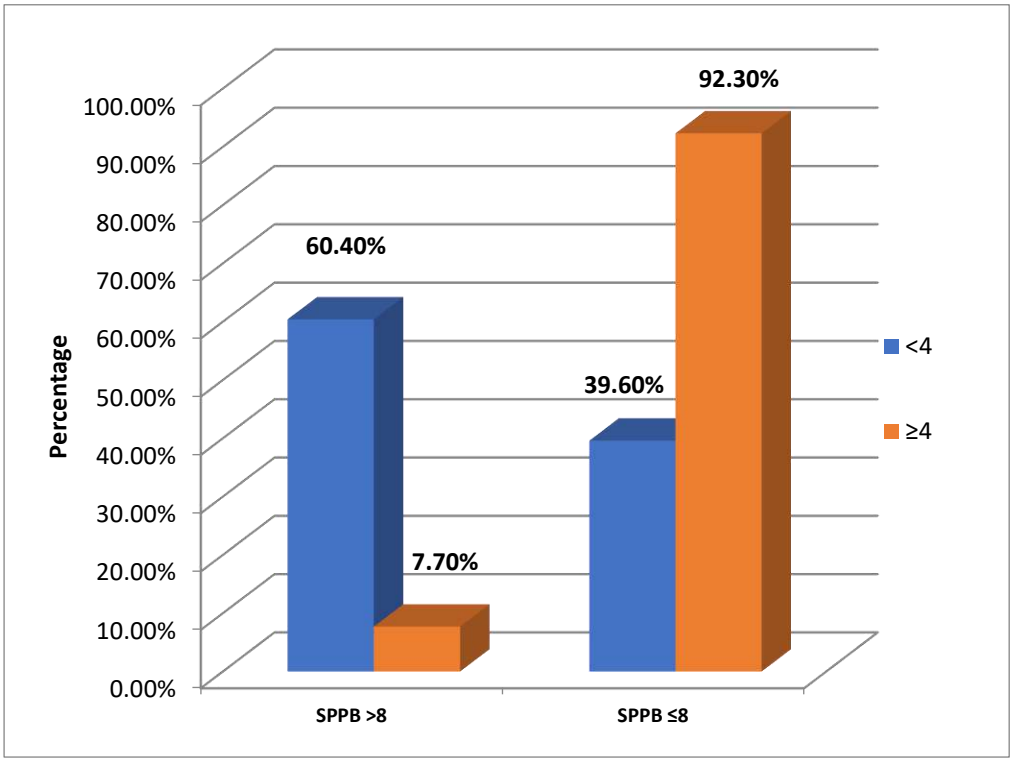


Figure 5l. SPPB SCORE PATTERN IN NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SARC-F



SKELETAL MASS INDEX (SMI)

The gold standard methods for the measurement of skeletal muscle mass include computed tomography, magnetic resonance imaging, and dual-energy X-ray absorptiometry. Unlike these radiological modalities, the method adopted in our study was an anthropometry-based calculation of appendicular skeletal muscle mass. Only one patient was sarcopenic according to SMI criteria of skeletal muscle mass. The patient was 48 years old male who was diagnosed case of hypothyroidism with no history of alcohol consumption. The patient was vegan with a BMI of 38.97 kg/m^2(obese class 2) with both raised waist circumference (127cm) and mid-arm circumference (35cm). The patient had fatty liver grade 3 but no evidence of sarcopenia as per SARC-F, hand grip strength, or SPPB test.

HAND GRIP STRENGTH (HGS) (Table. 6)

The hand grip strength was assessed using a hand-held dynamometer which revealed that 60 patients (30%) had low HGS out of the total 200 patients (female: n=21, 35%, males: n=39, 65%).

There was a significant association between increasing age and sarcopenia according to hand grip strength analysis (chi-square- 10.686, p-value- 0.03). The mean age of the sarcopenic group was 56.67 ± 17.33 years which was significantly greater (p-value- 0.004) than the non-sarcopenic group (49.23 ± 16.09 years). The maximum number of sarcopenic patients (n= 29, 48.4%) were above 60 years as compared to 25% (n=35) of the non-sarcopenic group.

Out of 60 patients with low HGS, 9 (15%) were diabetic, 17 (28.3%) were hypertensive, and 5 (8.3.%) had hypothyroidism. Only 6 out of 60 patients (10%) had a history of alcohol consumption. The predominant dietary pattern of the patients with sarcopenia was non-vegetarian (n= 42, 70%) followed by lacto-ovo-vegetarian (n=13, 21.7%) and vegan (n=5, 8.3%). No significant association was found between low HGS and comorbidities, alcohol consumption, or dietary pattern.

The mean BMI of the sarcopenic group was 24.22 ± 5.30 kg/m^2 which was significantly lower (p value-0.001) than that of the non-sarcopenic group (27.05 ± 5.26 kg/m^2). A significant number of patients (chi square-

16.515, p-value- 0.002) with low HGS were underweight (13.3%, n= 8) and normal (30%, n=43) as compared to non-sarcopenic patients (underweight- 2.1%, n=3, normal- 17.9%, n= 25). Only 24 patients (40%) with low HGS were obese (obese class 1: n=14, 23.3%, obese class 2: n=10, 16.7%). Out of the total 11 underweight patients, 8 (72.72%) had low muscle strength. Out of the total 112 obese patients, only 24 (21.42%) had low muscle strength.

Low waist circumference (males ≤98 cm, females ≤84 cm) was significantly associated with low HGS (chi-square- 8.962, p-value- 0.003). Out of 60 patients with low HGS, 66.7% (n=40) patients had low WC as compared to 43.6% (n=61) among the non-sarcopenic group. The mean WC in the sarcopenic group was 92.55 ± 11.92 cm which was significantly lower (p-value- 0.022) than the mean WC of the non-sarcopenic group (96.61 ± 11.12 cm).

A significant association was found between the low mid-arm circumference and low hand grip strength (chi square-5.672, p-value- 0.017). Out of 60 sarcopenic patients, 48 (80%) had low MAC as compared to 62.9% (n=88) among the non-sarcopenic group. The mean MAC in the sarcopenic group was 27.63 ± 3.74 cm which was significantly lower (p-value- 0.001) than the mean WC of the non-sarcopenic group (29.54 ± 3.72 cm).

There was a significant association between low subcutaneous fat stores and low HGS (chi square-18.046, p-0.001). Poor fat stores were found in 15% (n=9) and 0.7% (n=1) of sarcopenic and non-sarcopenic patients, respectively. Muscle wasting also showed a significant association with sarcopenia (chi square-7.724, p-0.021) with 26.7% (n=`16) and 3.3% (n=2) of sarcopenic patients having moderate and poor muscle bulk.

Among the 60 sarcopenic patients, on ultrasonography, fatty liver was grade I,

II and III in 28(46.7%), 27(45.0%) and 5(8.3%) patients thus showing no significant correlation between the severity of grade of fatty liver and sarcopenia (p-0.540).

Out of 60 patients showing low muscle strength as per low hand grip strength, 31 (51.7%) also had low muscle performance according to the SPPB test.

Table 6: SARCOPENIA ASSESSMENT ACCORDING TO HAND GRIP STRENGTH

			HAND GRIP STRENGTH				Total	Chi-square value	p-value
			Males- >26 Females- >16		Males- ≤26 Females- ≤16				
AGE GROUP		< 20 years	2	1.4%	1	1.7%	3	10.686	0.03
		21-40 years	40	28.6%	12	20.0%	52		
		41-60 years	63	45.0%	18	30.0%	81		
		61-80 years	30	21.4%	25	41.7%	55		
		> 80 years	5	3.6%	4	6.7%	9		
Total			140	100.0%	60	100.0%	200		
SEX		Female	59	42.1%	21	35.0%	80	0.893	0.345
		Male	81	57.9%	39	65.0%	120		
CHIEF COMPLAINTS	**FATIQUE**	No	118	84.3%	50	83.3%	168	0.028	0.866
		Yes	22	15.7%	10	16.7%	32		
	WEAKNESS	No	114	81.4%	44	73.3%	158	1.659	0.198
		Yes	26	18.6%	16	26.7%	42		
	LETHARGY	No	136	97.1%	56	93.3%	192	1.589	0.208
		Yes	4	2.9%	4	6.7%	8		
	LOOSE STOOLS	No	108	77.1%	46	76.7%	154	0.005	0.942
		Yes	32	22.9%	14	23.3%	46		
	STIGMATA OF LIVER DISEASE	No	137	97.9%	60	100.0%	197	1.305	0.253
		Yes	3	2.1%	0	0.0%	3		
	FEVER	No	131	93.6%	55	91.7%	186	0.234	0.629
		Yes	9	6.4%	5	8.3%	14		
COMORBIDITES		No	130	92.9%	51	85.0%	181	3.016	0.082

	DIABETES MELLITUS	Yes	10	7.1%	9	15.0%	19		
	HYPERTENSION	No	108	77.1%	43	71.7%	151	0.681	0.409
		Yes	32	22.9%	17	28.3%	49		
	BRONCHIAL ASTHMA	No	140	100.0%	60	100.0%	200		
	HYPOTHYROIDISM	No	126	90.0%	55	91.7%	181	0.136	0.713
		Yes	14	10.0%	5	8.3%	19		
	CAD	No	136	97.1%	60	100.0%	196	1.749	0.319
		Yes	4	2.9%	0	0.0%	4		
	OTHERS							3.181	0.672
		CHRONIC AF	1	0.7%	0	0.0%	1		
		CHRONIC HEPATITIS C	1	0.7%	0	0.0%	1		
		OLD TREATED KOCH	9	6.4%	7	11.7%	16		
		POST COVID	1	0.7%	0	0.0%	1		
		PSOARIASIS	1	0.7%	0	0.0%	1		
Total			140	100.0%	60	100.0%	200		
ALCOHOL		No	129	92.1%	54	90.0%	183	0.248	0.619
		Yes	11	7.9%	6	10.0%	17		
DIETARY PATTERN		**VEGAN**	4	2.9%	5	8.3%	9	2.931	0.131
		LACTO-OVO-VEGETARIAN	39	27.9%	13	21.7%	52	1.32	0.517
		PESCO-VEGETARIAN	0	0.0%	0	0.0%	0		
		SEMI-VEGETARIAN	1	0.7%	0	0.0%	1	0.431	0.513
		NON-VEGETARIAN	96	68.6%	42	70.0%	138	0.04	0.841
BMI GROUP		≤18.5 kg/m^2	3	2.1%	8	13.3%	11	16.515	0.002
		18.5- 22.9 kg/m^2	25	17.9%	18	30.0%	43		

		23- 24.9 kg/m^2	24	17.1%	10	16.7%	34		
		25- 29.9 kg/m^2	47	33.6%	14	23.3%	61		
		≥ 30 kg/m^2	41	29.3%	10	16.7%	51		
WAIST CIRCUMFERENCE GP		Males- ≤98 cm Females- ≤ 84 cm	61	43.6%	40	66.7%	101	8.962	0.003
		Males->98 cm Females-> 84 cm	79	56.4%	20	33.3%	99		
MID- ARM CIRCUMFERENCE GP		Males- <30.9 cm Females- <30.0 cm	88	62.9%	48	80.0%	136	5.672	0.017
		Males- <30.9 cm Females- <30.0 cm	52	37.1%	12	20.0%	64		
SUBCUTANEOUS FAT STORES	**UNDER THE EYES**	Good	117	83.6%	43	71.7%	160	18.046	0.001
		Fair	22	15.7%	8	13.3%	30		
		Poor	1	0.7%	9	15.0%	10		
	BICEPS	Good	117	83.6%	43	71.7%	160	18.046	0.001
		Fair	22	15.7%	8	13.3%	30		
		Poor	1	0.7%	9	15.0%	10		
	TRICEPS	Good	117	83.6%	43	71.7%	160	18.046	0.001
		Fair	22	15.7%	8	13.3%	30		
		Poor	1	0.7%	9	15.0%	10		
MUSCLE WASTING	**TEMPLE**	Absent	121	86.4%	42	70.0%	163	7.724	0.021
		Moderate	16	11.4%	16	26.7%	32		
		Poor	3	2.1%	2	3.3%	5		
	CLAVICLE	Absent	121	86.4%	42	70.0%	163	7.724	0.021
		Moderate	16	11.4%	16	26.7%	32		
		Poor	3	2.1%	2	3.3%	5		
	SHOULDER	Absent	121	86.4%	42	70.0%	163	7.724	0.021

		Moderate	16	11.4%	16	26.7%	32		
		Poor	3	2.1%	2	3.3%	5		
	QUADRICEPS	Absent	121	86.4%	42	70.0%	163	7.724	0.021
		Moderate	16	11.4%	16	26.7%	32		
		Poor	3	2.1%	2	3.3%	5		
	CALF	Absent	121	86.4%	42	70.0%	163	7.724	0.021
		Moderate	16	11.4%	16	26.7%	32		
		Poor	3	2.1%	2	3.3%	5		
	KNEE	Absent	121	86.4%	42	70.0%	163	7.724	0.021
		Moderate	16	11.4%	16	26.7%	32		
		Poor	3	2.1%	2	3.3%	5		
GRADE OF FATTY LIVER		1	56	40.0%	28	46.7%	84	1.233	0.540
		2	66	47.1%	27	45.0%	93		
		3	18	12.9%	5	8.3%	23		
Total			140	100.0%	60	100.0%	200		
SPPB		>8	85	60.7%	29	48.3%	114	2.627	0.105
		≤8	55	39.3%	31	51.7%	86		
Total			140	100.0%	60	100.0%	200		

HAND GRIP STRENGTH	Males- >26 Females- >16		Males- ≤26 Females- ≤16		t	p-value
	Mean	SD	Mean	SD		
AGE	49.23	16.09	56.67	17.33	-2.927	0.004
BODY WEIGHT	75.56	15.77	67.32	16.54	3.340	0.001
HEIGHT	1.67	0.08	1.66	0.10	0.408	0.684
BMI	27.05	5.26	24.22	5.30	3.478	0.001
WAIST CIRCUMFERENCE	96.61	11.12	92.55	11.92	2.314	0.022
HIP CIRCUMFERENCE	97.84	10.23	94.52	10.79	2.069	0.040
MID- ARM CIRCUMFERENCE GP	29.54	3.72	27.63	3.74	3.320	0.001

Figure 6a: AGE DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO HAND GRIP STRENGTH

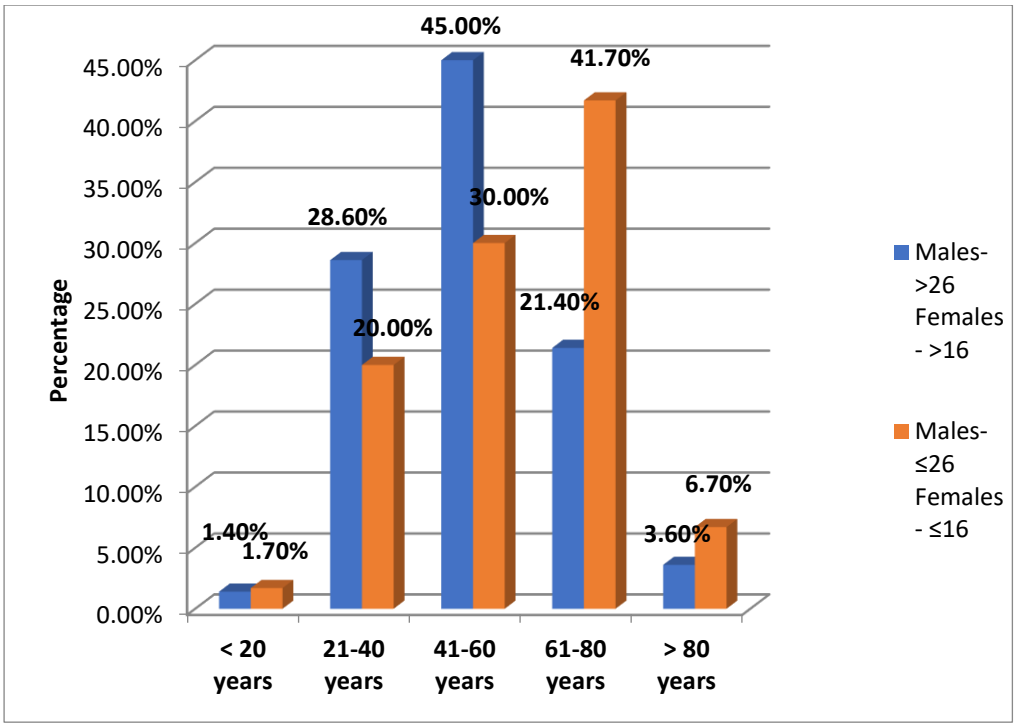


Figure 6b: GENDER DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO HAND GRIP STRENGTH

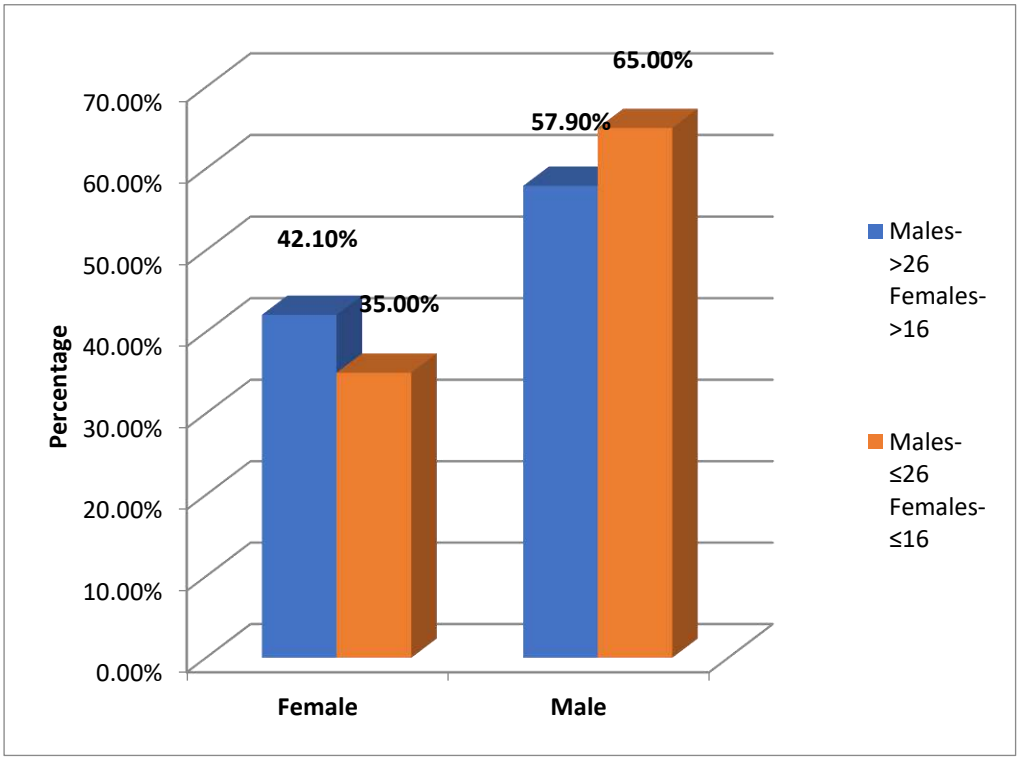


Figure 6c: COMORBIDITIES DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO HAND GRIP STRENGTH

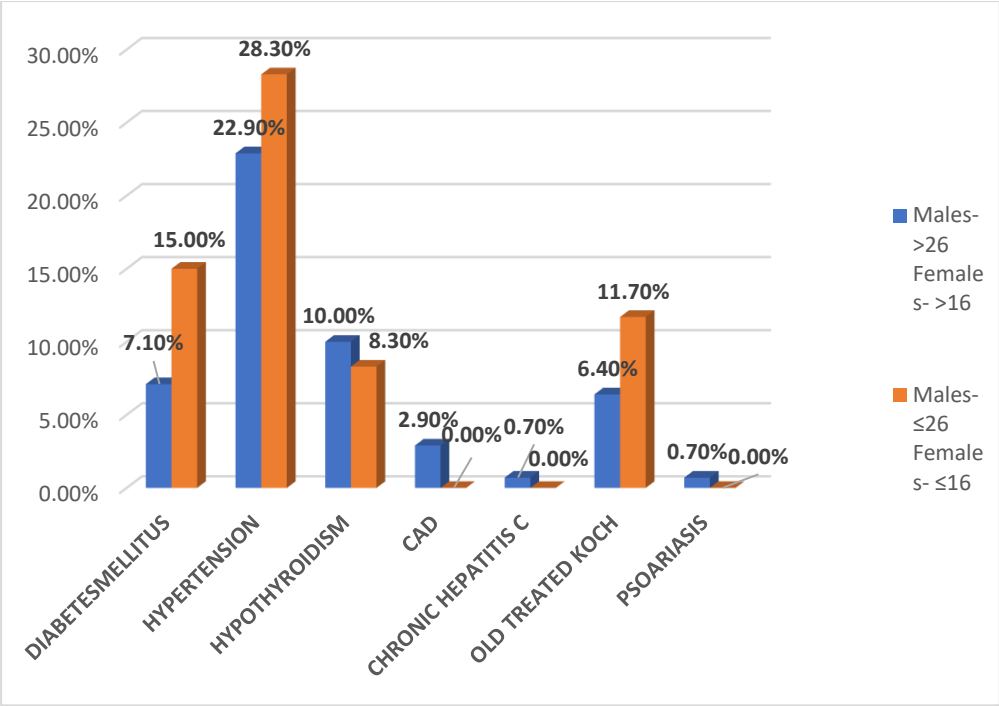


Figure 6d: ALCOHOL CONSUMPTION PATTERN AMONG NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO HAND GRIP STRENGTH

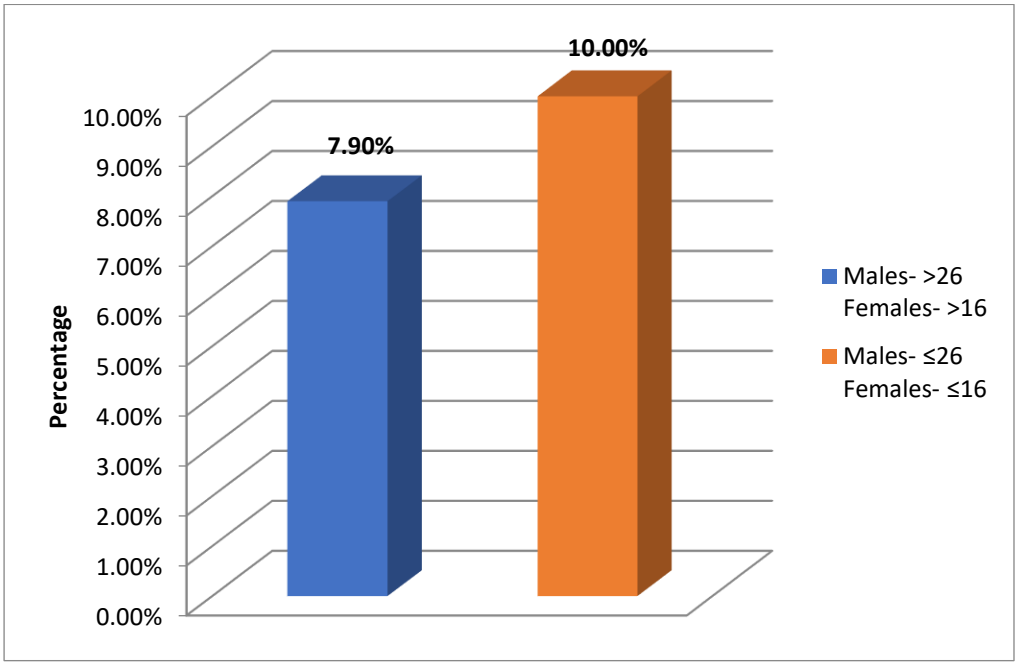


Figure 6e: DIETARY PATTERN OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO HAND GRIP STRENGTH

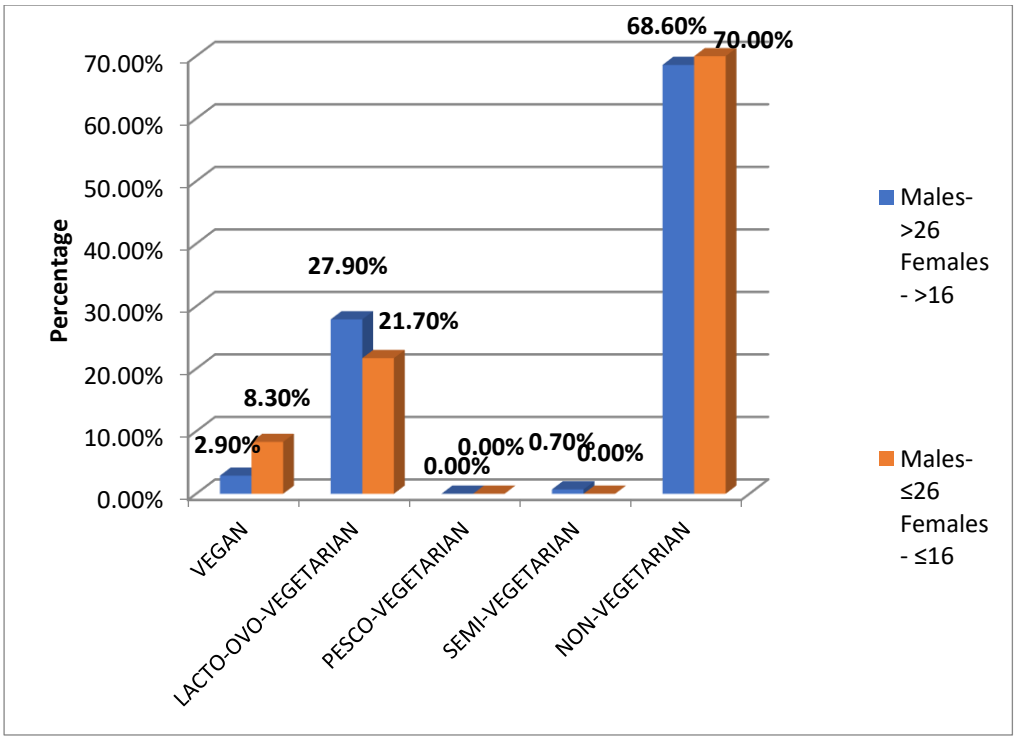


Figure 6f: BMI PATTERN OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS (ACCORDING TO HAND GRIP STRENGTH) ACCORDING TO ASIAN CLASSIFICATION

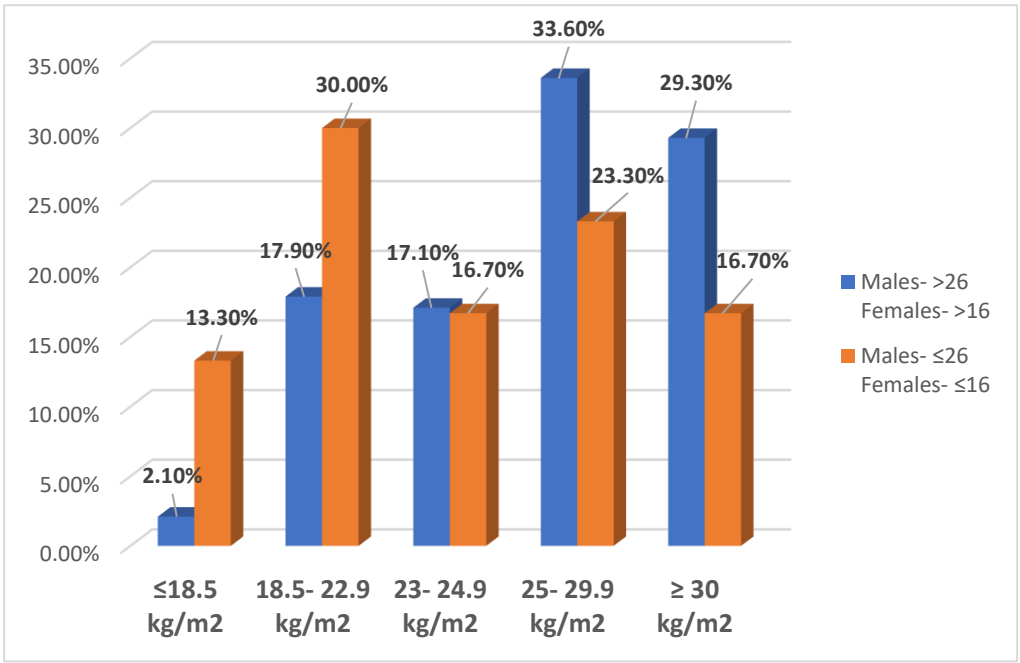


Figure 6g: WAIST CIRCUMFERENCE PATTERN OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO HAND GRIP STRENGTH

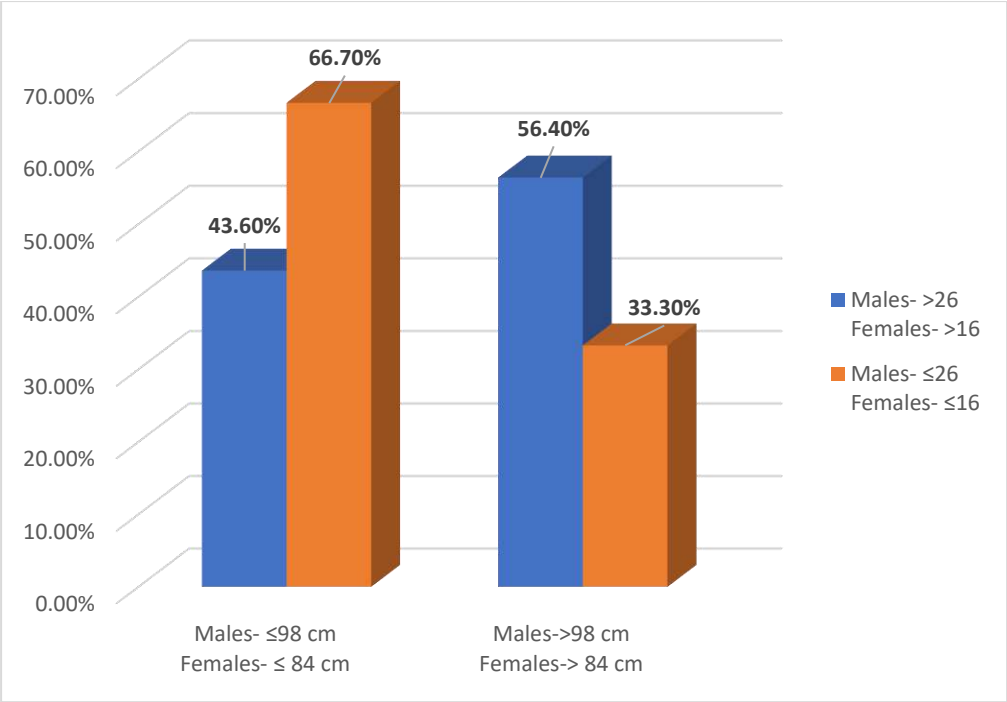


Figure 6h: MID ARM CIRCUMFERENCE PATTERN OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO HAND GRIP STRENGTH

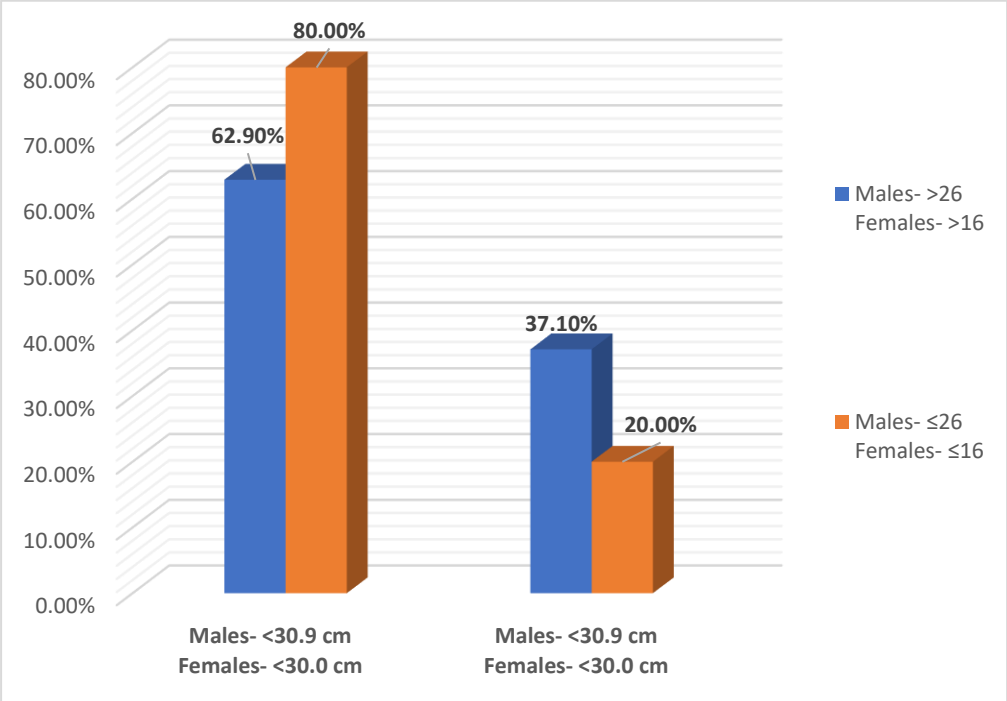


Figure 6i: SUBCUTANEOUS FAT STORES AND MUSCLE WASTING OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO HAND GRIP STRENGTH

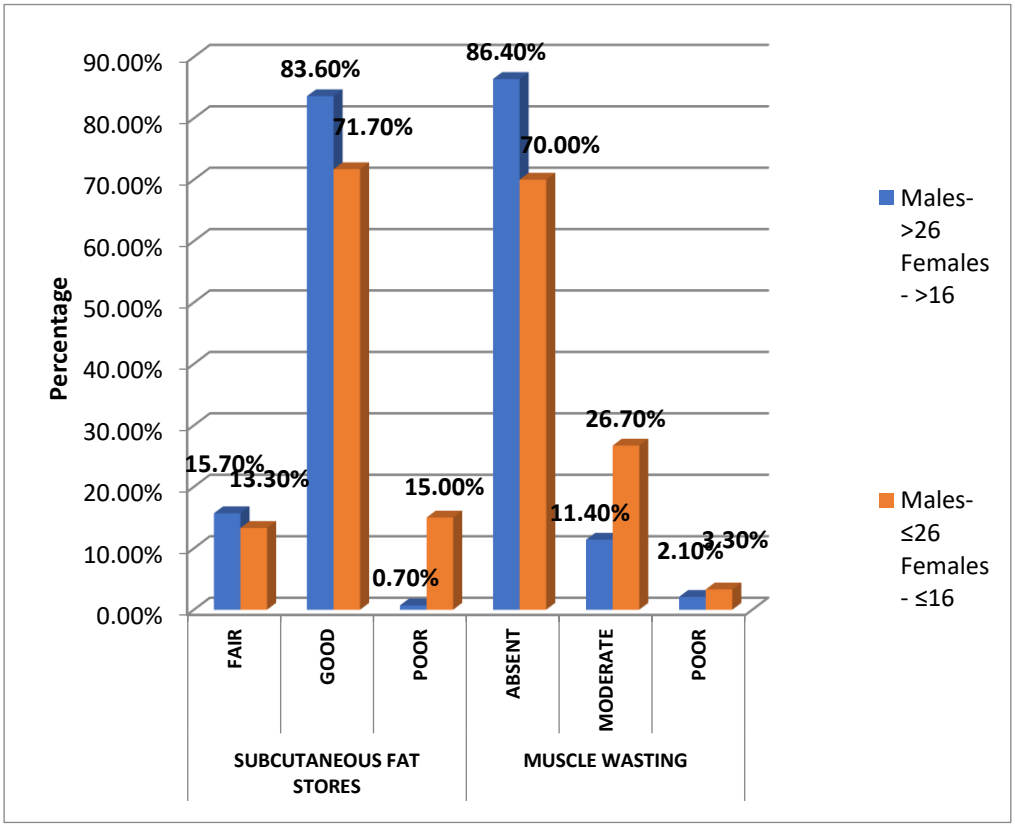


Figure 6j: GRADES OF FATTY LIVER DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO HAND GRIP STRENGTH

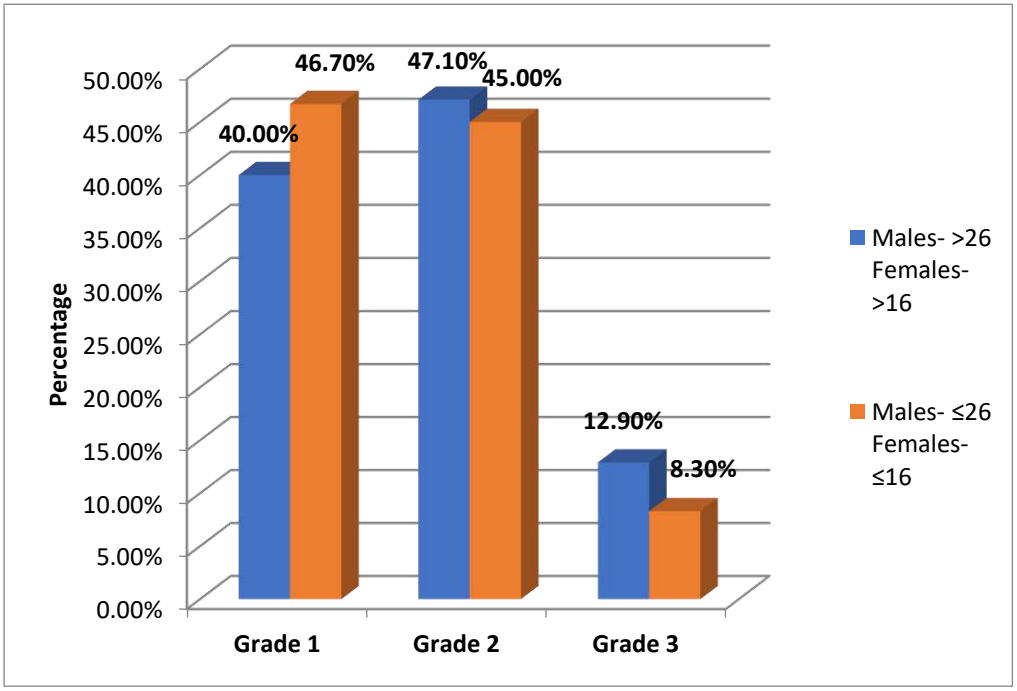
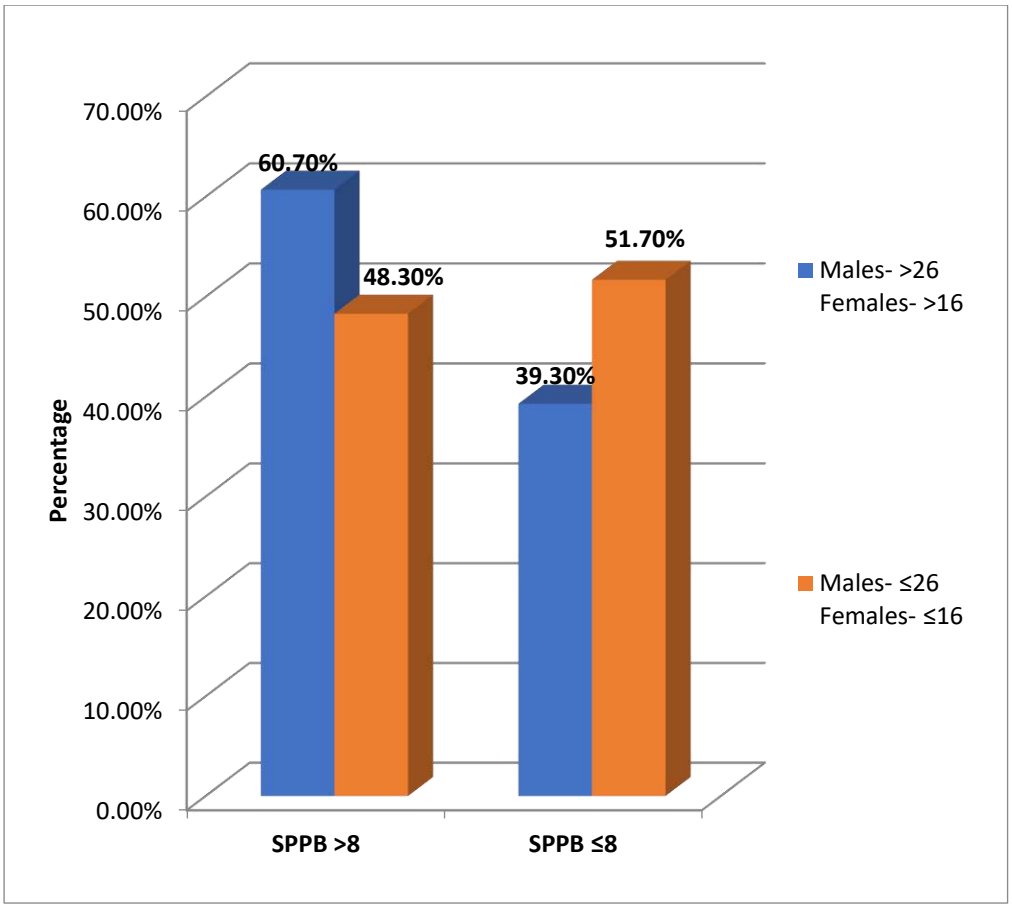


Figure 6k: SPPB SCORE PATTERN IN NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO HAND GRIP STRENGTH



SHORT PHYSICAL PERFORMANCE BATTERY TEST (SPPB) (Table. 7)

The muscle performance was assessed using the Short Physical Performance Battery test and the criteria used for diagnosis of sarcopenia was a score of ≤ 8 out of 12. Out of the total 200 participants, 86 (43%) patients had a SPPB score of ≤ 8.

A significant association was found between low SBBB and advanced age (chi-square- 19.31, p-value-0.001). Among the 86 sarcopenic patients, 38 (44.2%) were above 60 years of age whereas only 22.8% (26 patients) among the non-sarcopenic group were above 60 years. The mean age of sarcopenic patients was 57.53 ± 16.29 years as compared to a significantly lower (p-value- 0.000) mean age of 46.88 ± 15.72 years of non-sarcopenic patients

Out of 86 sarcopenic patients, 51 (59.3%) were female and 35 (40.7%) were male. A significant association was found between the female gender and low muscle performance (chi-square- 23.422, p-value-0.001).

A significantly greater number of sarcopenic patients were hypertensives (n=27, 31.4%) (chi-square- 3.878, p-value-0.049) and had coronary artery disease (n=4, 4.7%) (chi-square- 5.411, p-value-0.033). Eleven patients (12.8%) were diabetic and 11 (12.8%) had hypothyroidism.

Out of 86 patients, only 4.7% (4 patients) gave a history of alcohol consumption while another greater half 95.3% were non-alcoholic. Among patients with sarcopenia, the predominant dietary pattern was non-vegetarian (n=57, 66.3%) followed by lacto-ovo-vegetarian (n=24, 27.9%). No significant association was found between low SPPB and alcohol consumption or dietary pattern.

The mean BMI of the sarcopenic cohort was 26.26 ± 5.75 kg/m^2 which was slightly higher than the non-sarcopenic group (26.15 ± 5.18 kg/m^2). The maximum number of patients (n=48, 55.8%) in the sarcopenic group belong to the obese category as per the Asian classification of BMI. Among these, 26 (30.2%) and 22 (25.6%) patients belonged to obese class 1 and obese class 2, respectively. But no significant association

was found between BMI and sarcopenia as per the SPPB test (chi-square- 0.671, p-value- 0.955).

No significant association was found between low SPPB and waist circumference (p-value- 0.206) or mid-arm circumference (p-value- 0.125). The mean waist circumference of the sarcopenic patients was 94.56 ± 12.01 cm which was lower than the non-sarcopenic group (96.02 ± 11.09). Out of 86 sarcopenic patients, 47(54.7%) had high WC. The mean mid-arm circumference of the sarcopenic patients was 29.23 ± 4.30 cm which was slightly greater than the non-sarcopenic group (28.76 ± 3.42). Out of 86 sarcopenic patients, 33 (38.4%) were obese and 53 (61.6%) were non-obese as per the mid-arm circumference criteria.

Among the 86 sarcopenic patients, subcutaneous fat stores were good, fair, and poor in 69 (80.2%), 11 (12.8%), and 6 (7.0%) patients. Muscle wasting was absent in 79.1% (n=68) of patients with moderate and poor muscle bulk in 15 (17.4%) and 3 (3.5%) patients, respectively. No significant association was found between low SPPB and subcutaneous stores (p-value- 0.434) or muscle wasting (p-value- 0.639).

Among the 86 sarcopenic patients, on ultrasonography, fatty liver was grade I,

II and III in 31(36.0%), 44(51.2%) and 11(12.8%) patients thus showing no significant correlation between the severity of grade of fatty liver and sarcopenia (p-0.333).

Table 7: SARCOPENIA ASSESSMENT ACCORDING TO SHORT PHYSICAL PERFORMANCE BATTERY TEST

			SPPB				Total	Chi-square value	p-value
			> 8		≤ 8				
AGE GROUP		< 20 years	3	2.6%	0	0.0%	3	19.31	0.001
		21-40 years	35	30.7%	17	19.8%	52		
		41-60 years	50	43.9%	31	36.0%	81		
		61-80 years	26	22.8%	29	33.7%	55		
		> 80 years	0	0.0%	9	10.5%	9		
Total			114	100.0%	86	100.0%	200		
SEX		Female	29	25.4%	51	59.3%	80	23.422	0.001
		Male	85	74.6%	35	40.7%	120		
CHIEF COMPLAINTS	**FATIQUE**	No	98	86.0%	70	81.4%	168	0.762	0.383
		Yes	16	14.0%	16	18.6%	32		
	WEAKNESS	No	92	80.7%	66	76.7%	158	0.463	0.496
		Yes	22	19.3%	20	23.3%	42		
	LETHARGY	No	108	94.7%	84	97.7%	192	1.102	0.294
		Yes	6	5.3%	2	2.3%	8		
	LOOSE STOOLS	No	92	80.7%	62	72.1%	154	2.051	0.152
		Yes	22	19.3%	24	27.9%	46		
	STIGMATA OF LIVER DISEASE	No	113	99.1%	84	97.7%	197	0.696	0.404
		Yes	1	0.9%	2	2.3%	3		
	FEVER	No	106	93.0%	80	93.0%	186	0.000	0.991
		Yes	8	7.0%	6	7.0%	14		
COMORBIDITIES		No	106	93.0%	75	87.2%	181	1.900	0.168

	DIABETES MELLITUS	Yes	8	7.0%	11	12.8%	19		
	HYPERTENSION	No	92	80.7%	59	68.6%	151	3.878	0.049
		Yes	22	19.3%	27	31.4%	49		
	BRONCHIAL ASTHMA	No	114	100.0%	86	100.0%	200		
	HYPOTHYROIDISM	No	106	93.0%	75	87.2%	181	1.900	0.168
		Yes	8	7.0%	11	12.8%	19		
	CAD	No	114	100.0%	82	95.3%	196	5.411	0.033
		Yes	0	0.0%	4	4.7%	4		
	OTHERS		106	93.0%	74	86.0%	180	6.904	0.228
		CHRONIC AF	1	0.9%	0	0.0%	1		
		CHRONIC HEPATITIS C	1	0.9%	0	0.0%	1		
		OLD TREATED KOCH	6	5.3%	10	11.6%	16		
		POST COVID	0	0.0%	1	1.2%	1		
		PSOARIASIS	0	0.0%	1	1.2%	1		
Total			114	100.0%	86	100.0%	200		
ALCOHOL		No	101	88.6%	82	95.3%	183	2.874	0.124
		Yes	13	11.4%	4	4.7%	17		
Total			114	100.0%	86	100.0%	200		
DIETARY PATTERN		**VEGAN**	5	4.4%	4	4.7%	9	0.008	0.929
		LACTO-OVO-VEGETARIAN	28	24.6%	24	27.9%	52	1.066	0.605
		PESCO-VEGETARIAN	0	0%	0	0%	0		
		SEMI-VEGETARIAN	0	0.0%	1	1.2%	1	1.332	0.248
		NON-VEGETARIAN	81	71.1%	57	66.3%	138	0.522	0.537
BMI GROUP		≤18.5 kg/m^2	5	4.4%	6	7.0%	11	0.671	0.955

		18.5- 22.9 kg/m^2	25	21.9%	18	20.9%	43		
		23- 24.9 kg/m^2	20	17.5%	14	16.3%	34		
		25- 29.9 kg/m^2	35	30.7%	26	30.2%	61		
		≥ 30 kg/m^2	29	25.4%	22	25.6%	51		
Total			114	100.0%	86	100.0%	200		
WAIST CIRCUMFERENCE GP		Males- ≤98 cm Females- ≤ 84 cm	62	54.4%	39	45.3%	101	1.602	0.206
		Males->98 cm Females-> 84 cm	52	45.6%	47	54.7%	99		
Total			114	100.0%	86	100.0%	200		
MID- ARM CIRCUMFERENCE GP		Males- <30.9 cm Females- <30.0 cm	83	72.8%	53	61.6%	136	2.815	0.125
		Males- <30.9 cm Females- <30.0 cm	31	27.2%	33	38.4%	64		
SUBCUTANEOUSFAT STORES	**UNDER THE EYES**	Good	91	79.8%	69	80.2%	160	1.671	0.434
		Fair	19	16.7%	11	12.8%	30		
		Poor	4	3.5%	6	7.0%	10		
	BICEPS	Good	91	79.8%	69	80.2%	160	1.671	0.434
		Fair	19	16.7%	11	12.8%	30		
		Poor	4	3.5%	6	7.0%	10		
	TRICEPS	Good	91	79.8%	69	80.2%	160	1.671	0.434
		Fair	19	16.7%	11	12.8%	30		
		Poor	4	3.5%	6	7.0%	10		
MUSCLE WASTING	**TEMPLE**	Absent	95	83.3%	68	79.1%	163	0.895	0.639
		Moderate	17	14.9%	15	17.4%	32		
		Poor	2	1.8%	3	3.5%	5		
	CLAVICLE	Absent	95	83.3%	68	79.1%	163	0.895	0.639

		Moderate	17	14.9%	15	17.4%	32		
		Poor	2	1.8%	3	3.5%	5		
	SHOULDER	Absent	95	83.3%	68	79.1%	163	0.895	0.639
		Moderate	17	14.9%	15	17.4%	32		
		Poor	2	1.8%	3	3.5%	5		
	QUADRICEPS	Absent	95	83.3%	68	79.1%	163	0.895	0.639
		Moderate	17	14.9%	15	17.4%	32		
		Poor	2	1.8%	3	3.5%	5		
	CALF	Absent	95	83.3%	68	79.1%	163	0.895	0.639
		Moderate	17	14.9%	15	17.4%	32		
		Poor	2	1.8%	3	3.5%	5		
	KNEE	Absent	95	83.3%	68	79.1%	163	0.895	6.39
		Moderate	17	14.9%	15	17.4%	32		
		Poor	2	1.8%	3	3.5%	5		
Total			114	100.0%	86	100.0%	200		
GRADE OF FATTY LIVER		**1**	53	46.5%	31	36.0%	84	2.197	0.333
		2	49	43.0%	44	51.2%	93		
		3	12	10.5%	11	12.8%	23		
Total			114	100.0%	86	100.0%	200		

SPPB	> 8		≤ 8			
	Mean	SD	Mean	SD	t	p-value
AGE	46.88	15.72	57.53	16.29	-4.673	0.000
BODY WEIGHT	74.23	15.43	71.58	17.59	1.133	0.259
HEIGHT	1.68	0.08	1.65	0.09	3.305	0.001
BMI	26.15	5.18	26.27	5.75	-0.153	0.879
WAISTCIRCUMFERENCE	96.02	11.09	94.56	12.01	0.889	0.375
HIPCIRCUMFERENCE	97.23	9.63	96.33	11.55	0.602	0.548
MID- ARMCIRCUMFERENCE GP	28.76	3.42	29.23	4.30	-0.849	0.397

Figure 7a: AGE DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SBBP

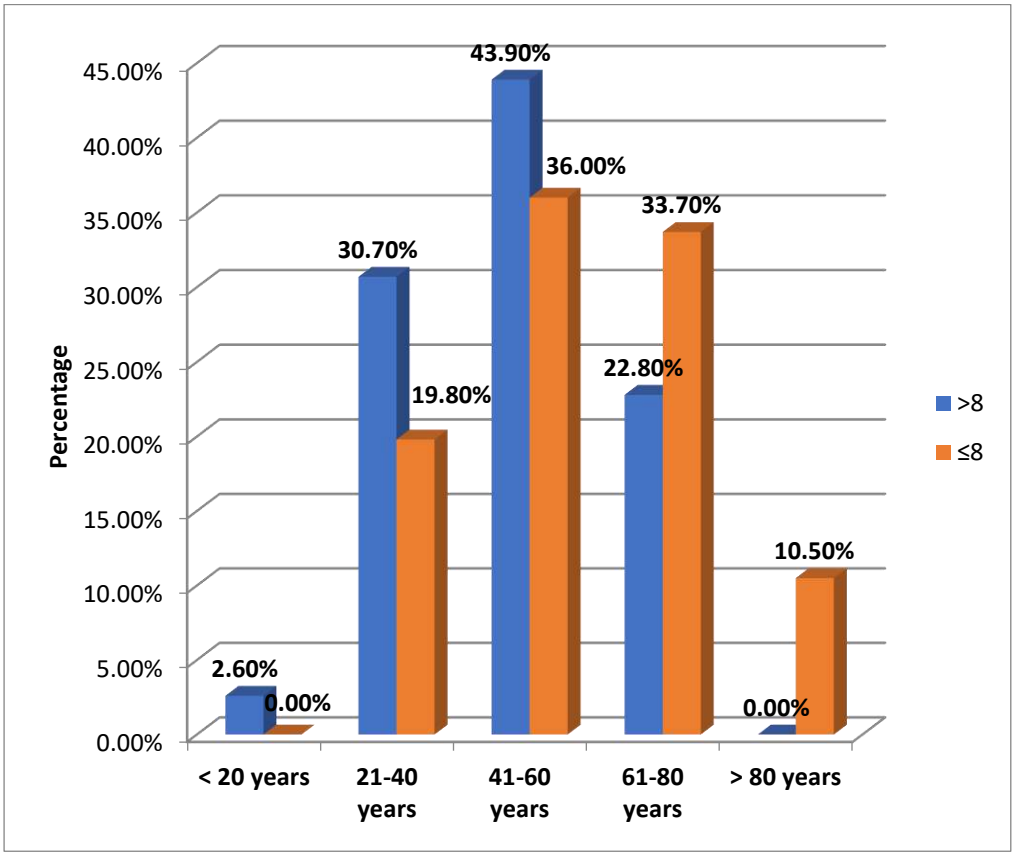


Figure 7b: GENDER DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SBBP

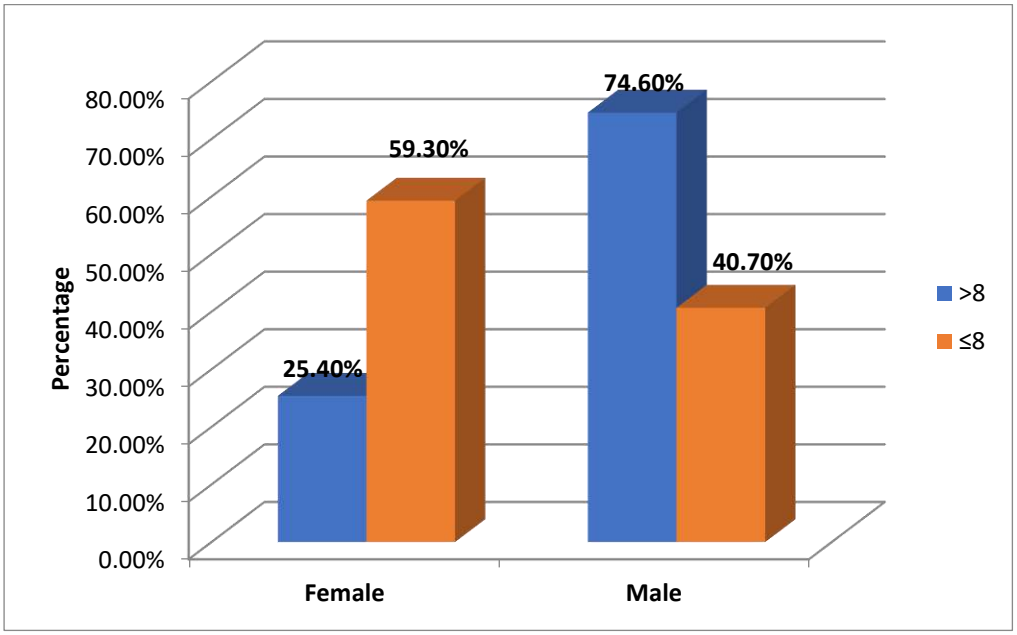


Figure 7c: COMORBIDITIES DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SBBP

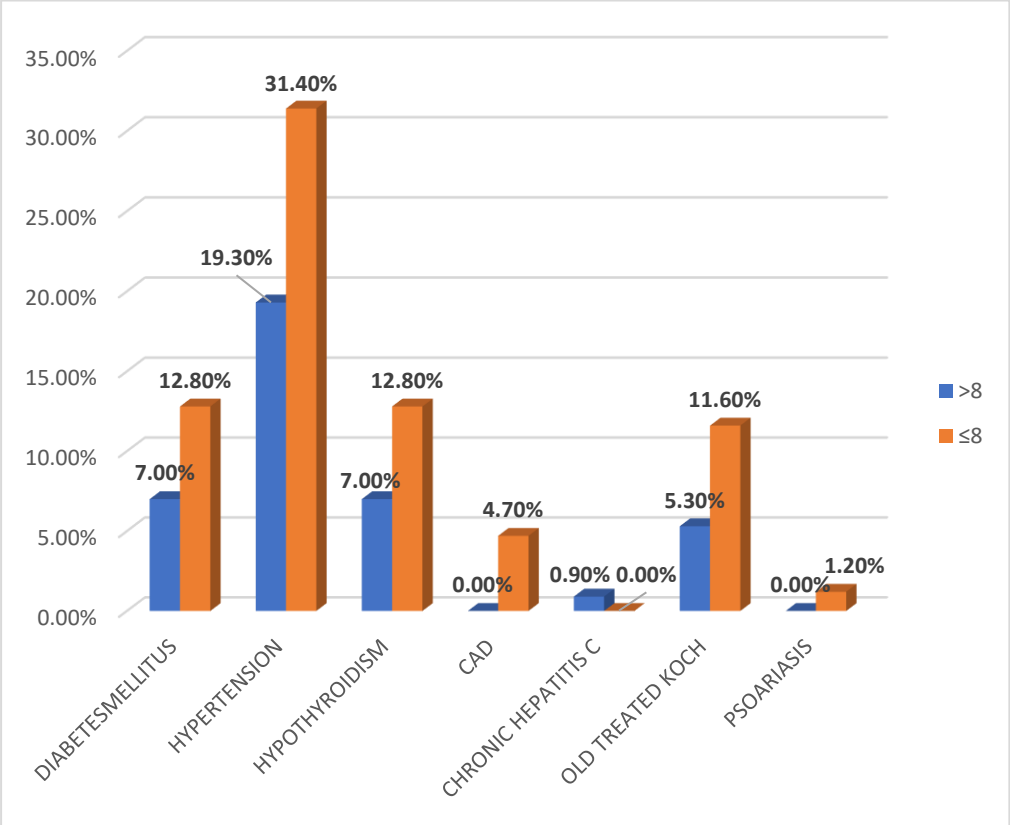


Figure 7d: ALCOHOL CONSUMPTION AMONG NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SBBP

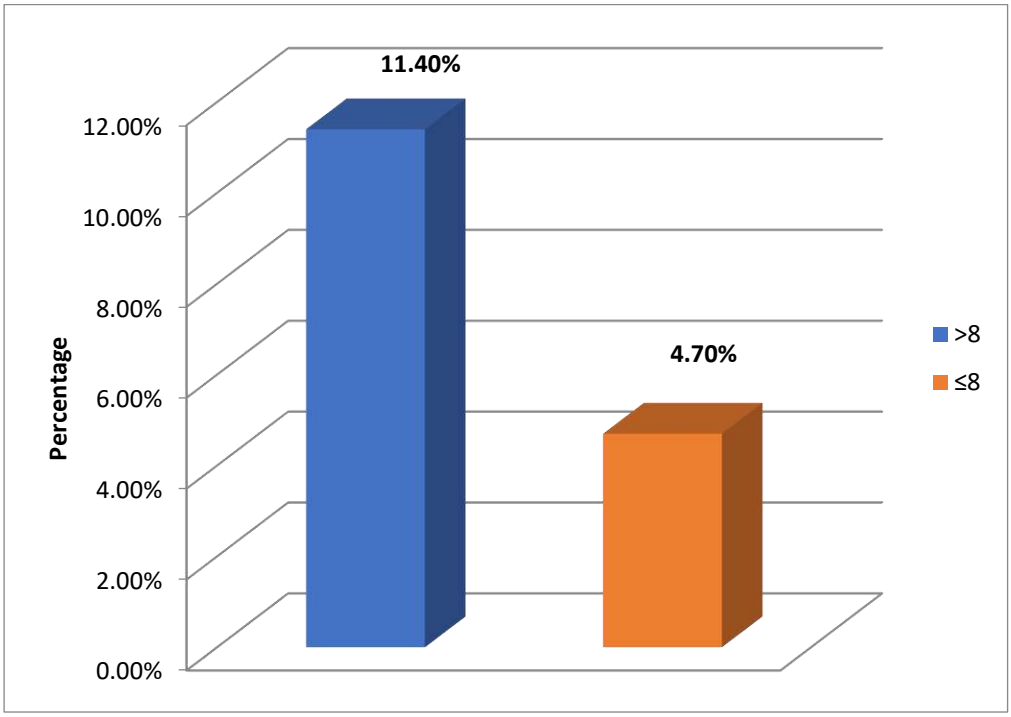


Figure 7e: DIETARY PATTERN DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SBBP

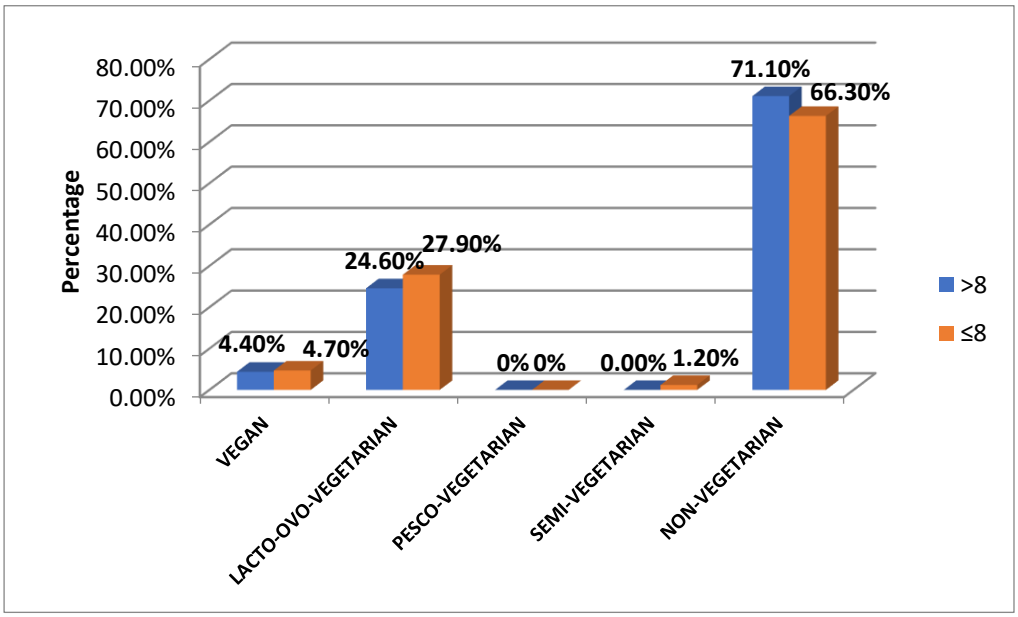


Figure 7f: BMI DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS (ACCORDING TO SBBP) ACCORDING TO ASIAN CLASSIFICATION

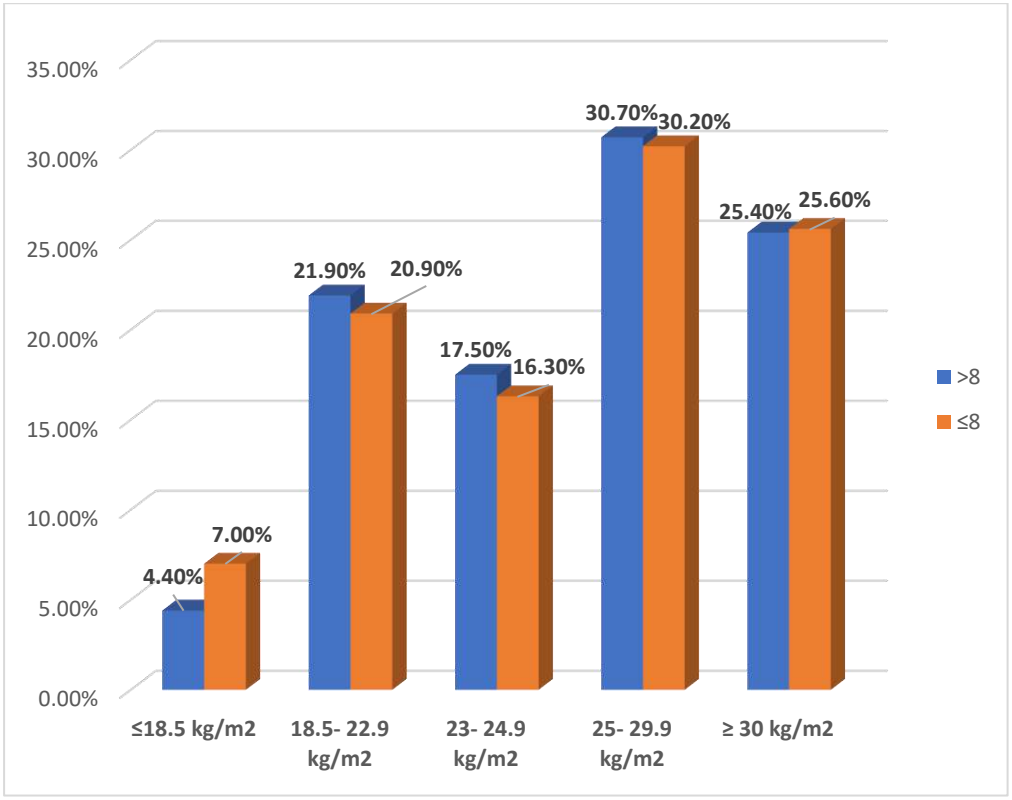


Figure 7g: WAIST CIRCUMFERENCE DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SBBP

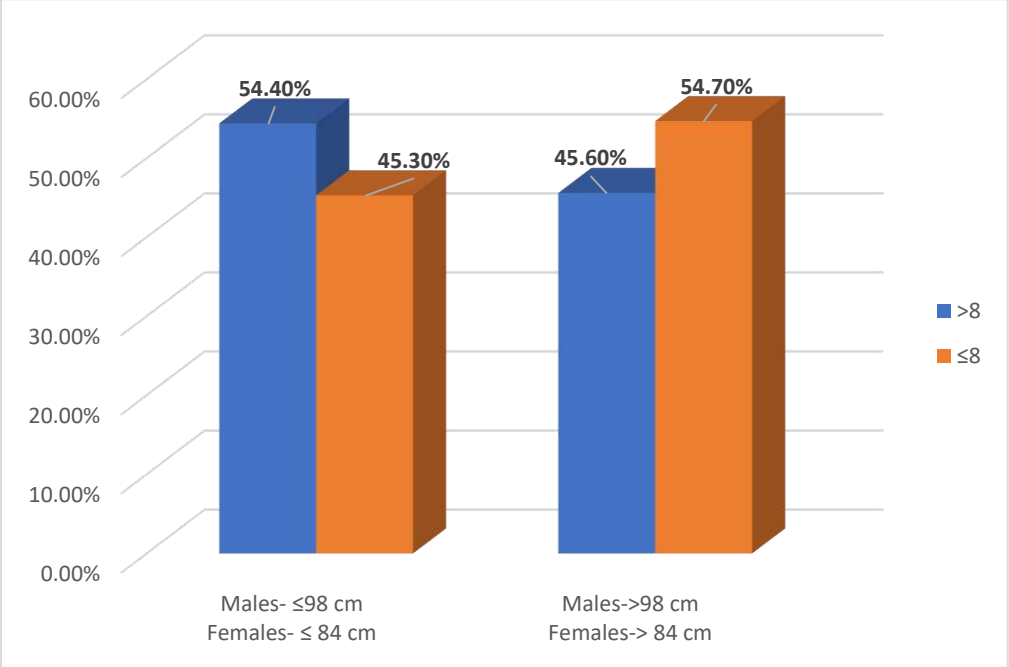


Figure 7h: MID ARM CIRCUMFERENCE DISTRIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SBBP

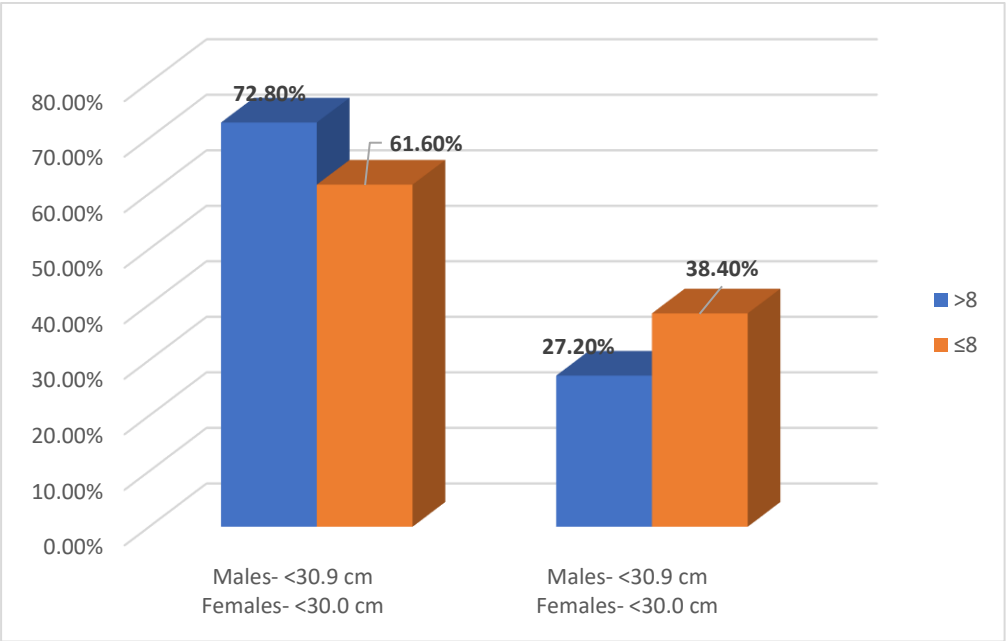


Figure 7i: SUBCUTANEOUS FAT STORES AND MUSCLE WASTING AMONG NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SBBP

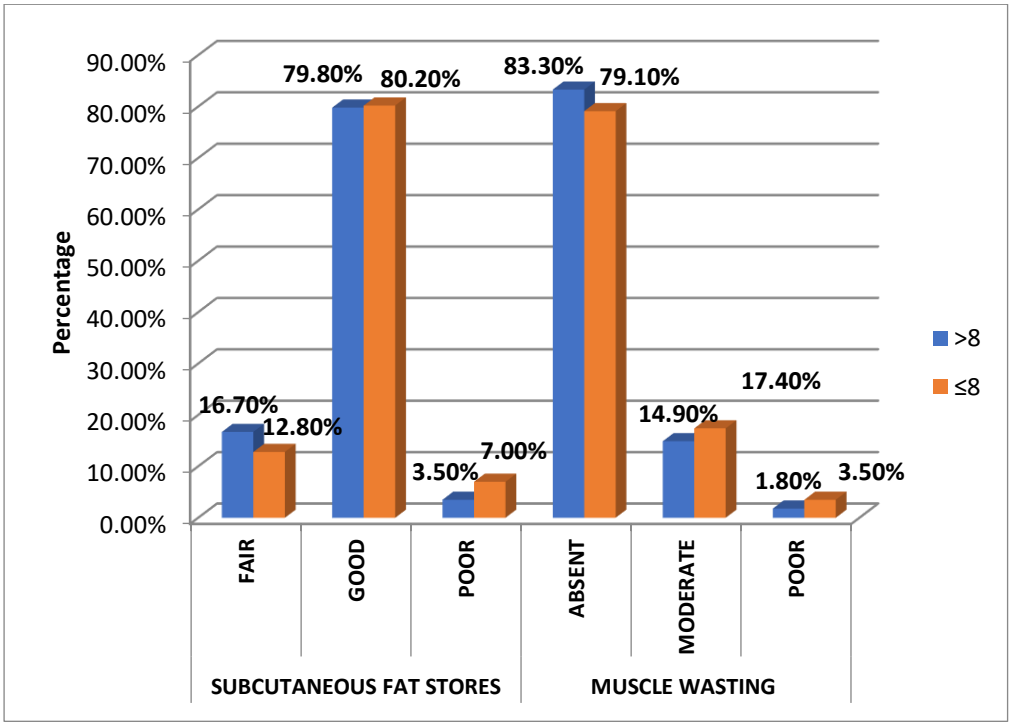
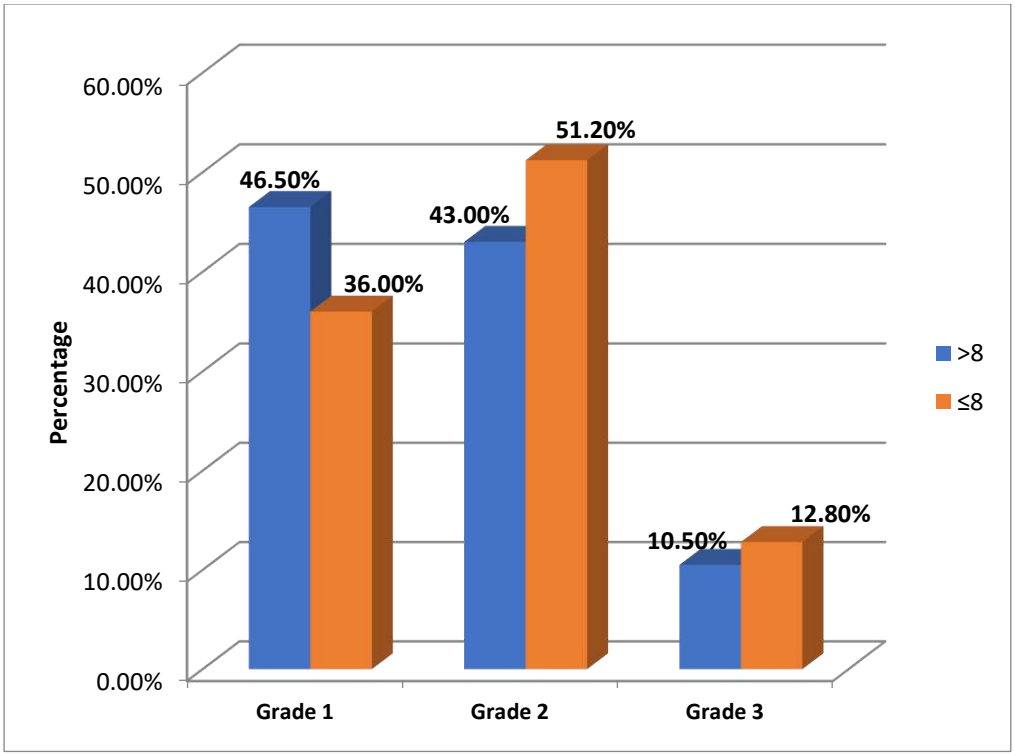


Figure 7j: GRADES OF FATTY LIVER DISTIBUTION OF NON-SARCOPENIC PATIENTS AND SARCOPENIC PATIENTS ACCORDING TO SBBP



DISCUSSION

Sarcopenia was first described at the end of the 20th century and is a syndrome characterized by progressive and generalized loss of skeletal muscle mass, strength, and performance.

Conventionally sarcopenia was considered a disease of the elderly but with the evolving knowledge of the subject, nowadays it is often considered to be a comorbid disease. Primary sarcopenia is related to aging, while secondary sarcopenia is seen in association with underlying diseases, lack of physical activity, or inadequate nutrition.

The worldwide prevalence of sarcopenia ranged from 8% to 36% depending on the criterion and definition used for sarcopenia. (47) The prevalence of sarcopenia in the Indian population was found to be approximately 17.5% (10). The prevalence increases with advancing age and may reach > 50% after 80 years of age. [59] As an aging disorder, it is considered a physiological process that starts in 3rd or 4th decade of life and aggravates after 6th decade when every year 3% of muscle strength is lost per year. [60]

Apart from aging, sarcopenia is encountered in patients of all ages with other disorders like cancer, chronic heart failure, chronic obstructive airway disease, neurological disorders, chronic kidney disease, chronic liver disease, and other debilitating conditions. In hepatology, sarcopenia has been studied extensively in patients with liver cirrhosis, end-stage liver disease (ESLD) and Non-Alcoholic Fatty Liver Disease (NAFLD). Literature reveals that sarcopenia is a common finding in patients with liver cirrhosis and ESLD which is a marker of poor prognosis and greater morbidity and mortality. [61-63]

Also, a significant overlap of pathophysiological mechanisms between fatty liver and sarcopenia is reported, contributing to confusion about whether sarcopenia is a cause or consequence of fatty liver disease. The crucial pathological mechanisms include the effects of insulin resistance, chronic inflammation, oxidative stress, and the interplay between multiple cytokines like hepatokines, adipokines, and myokines. Both hepatocytes and myocytes are the target tissues for the action of insulin.

Thus, insulin resistance is considered to be a key factor in the pathophysiology of both, NAFLD and sarcopenia [64,65].

Multiple studies have been conducted worldwide and even in Asia to analyze the association between sarcopenia and hepatic steatosis but very few studies have been conducted in India. In literature and everyday clinical practice, various tools and criteria have been devised and used for the evaluation of sarcopenia. In our study, sarcopenia was assessed by using SARC-F (the screening tool), Skeletal mass index (for skeletal muscle mass), Hand-grip strength (for skeletal muscle strength), and Short Physical Performance Battery test (for skeletal muscle performance).

We enrolled 200 patients who consented and had evidence of fatty liver on abdominal ultrasonography. The mean age of the cohort was 51.46 ± 16.78 years (males: n=120, 60%, females: n=80, 40%) with a mean BMI of 26.21 ± 5.42 kg/m^2 which falls in the obese category as per the Asian classification of BMI. The mean waist circumference and mid-arm circumference were 95.39 ± 11.49 cm and 29.16 ± 5.28 cm, respectively. The comorbidities of the cohort were hypertension (n=49, 24.5%), type 2 diabetes mellitus (n=19, 9.5%), and hypothyroidism (n=19, 9.5%) with only 8.5% (n=17) of patients gave a history of alcohol consumption.

According to the revised 2018 European Working Group on Sarcopenia in Older People (EWGSOP-2), guidelines, [5] low muscle strength is overtaking the role of low muscle mass as the principal determinant of sarcopenia. In our study, skeletal muscle strength assessment was done by measuring the hand grip strength (HGS) with a Hand-Held Dynamometer. A total of 60 patients (30%) were found to have low hand grip strength (males: n=39, 19.5%, females: n=21, 10.5%). A positive correlation was also found between low HGS and the incidence of NAFLD in studies conducted by Almeida NS et al [66] and Yang Xia et al. [67]

To date, there is no gold standard test available for the assessment of skeletal muscle mass in patients with fatty liver. Historically, skeletal muscle mass assessment was done by reference methods like cadaver dissection and underwater weighing. Various skeletal muscle indices

have been suggested adjusting for body weight, height, BMI, and appendicular lean mass. Also, although the traditional anthropometric measures do not differentiate fat from muscle, some methods such as mid-arm circumference (MAC) and triceps skin fold thickness are still used in clinical practice.

Due to recent advancements in radiological techniques, computed tomography (CT) and magnetic resonance imaging (MRI) are considered accurate and reliable methods for skeletal muscle mass quantification. These radiological modalities were validated against cadaver dissection in a study conducted by Mitsiopoulos N. et al [68]. As the radiological modalities are expensive and not readily available in every part of the country, the field methods for skeletal muscle analysis are dual-energy X-ray absorptiometry (DEXA), bioelectrical impedance analysis (BIA), and anthropometry. In a study conducted by Elia M et al.[69] the DEXA scan was found to be superior to BIA and anthropometry to predict muscle mass as validated against MRI. Also, the BIA method was found to be superior to anthropometric measurements.

Despite being statistically inferior, anthropometry-based evaluation of skeletal muscle mass is frequently administrated because of its advantage of being simple, inexpensive, and non-invasive. Our study utilized an anthropometry-based formula developed by Lee RC et al. [40] Based on this formula, only one patient was found to have low skeletal muscle mass. This observation was in concordance with the study conducted by Almeida NS et al [66] in which only 5.3%(n=3) patients had low muscle mass as per EWGSOP-1 criteria and none of the patients had low muscle mass as per EWGSOP-2 criteria. This signifies the lack of sensitivity of anthropometry-based formulas for muscle mass measurement.

SARC-F is a simple, easy-to-use, five points questionnaire used as a screening tool for sarcopenia. It was recommended by the 2018 European Working Group on Sarcopenia in Older People (EWGSOP) guidelines [5] for the assessment of skeletal muscle performance and also by the 2019 Consensus Update of the Asian Working Group for Sarcopenia as a modality for case finding[8]. The cut-off used in our study

for the diagnosis of sarcopenia was ≥ 4 score out of 10. Out of 200 total patients, only 13 patients (6.5%) had a score ≥ 4 (males: n=7, 53.8%, females: n=6, 46.2%). According to our study, SARC-F has excellent specificity (100%) but poor sensitivity (11.30%). Similarly, according to studies conducted in Hong Kong and Poland by Jean Woo et al [39] and Piotrowicz K et al,[70] SARC-F has excellent specificity and negative predictive value but poor sensitivity and negative predictive value for sarcopenia. Due to ease to use, lack of observer bias, and good reproducibility, SARC-F is considered a good screening tool with low sensitivity being a drawback.

Skeletal muscle performance was assessed in our study by the Short Physical Performance Battery (SPPB) test, which involves an objective assessment of 3 parameters: Repeated chair stands, Balance test, and 8 feet walk test. The criteria used for diagnosis of sarcopenia is a score ≤ 8 out of 12. Phu S et al [45] demonstrated that the currently recommended SPPB cut point of ≤ 8 had a high sensitivity (82- 100%) but low specificity (36–41%) for sarcopenia. In our study, 43% (n=86) (males: n=35, 40.7%, females: n=51, 59.3%) of patients were found to have a score ≤ 8. Similarly, in a study conducted by Almeida NS et al, [66] 28.1% (n=16) of the NAFLD patients were found to have low skeletal muscle performance.

A significant association was found between increasing age and low HGS (p-value- 0.03), low SPPB (p-value- 0.001), and a high SARC-F score (p-value- 0.001) and this was in concordance with the conventional age-related definition of sarcopenia.

A significant number (n=51, 59.3%) of females had low muscle performance (p-value- 0.001) in our study. In a similar study conducted in Egypt by Behiry ME et al [71], the SPPB score was found to be significantly lower in females (5.18 ± 2.420) than in males (6.83 ± 2.866). However, in the study conducted in Chennai, India by Evuri P et al[72] only 12% (n=3) among the sarcopenic group were females. These variations in gender-related prevalence may be due to the regional variations and recruitment of participants in different gender ratios.

No significant association was found in our study between alcohol consumption and sarcopenic parameters. This is in concordance with the meta-analysis conducted by Steffl M et al [73] that alcohol consumption is not a risk factor for sarcopenia.

In our study, a significant positive correlation was found between low HGS and low BMI (mean BMI- 24.22 ± 5.30 kg/m^2, p-value- 0.001). Similarly, a linear positive correlation was found between HGS and BMI in studies conducted by Liao KH et al[74] and Ibegbu AO et al. [75] On the contrary, a study conducted by Inhwan Lee et al[76] showed a significant relationship between increasing HGS and low BMI. In another study by Almeida NS et al, [66] it was found that a higher number of patients with low HGS (80.0%, n=12) were overweight. The discrepancy in results of various studies could be due to participants being of different age groups, gender ratios, ethnicity, occupation, and food habits.

A significant positive correlation was demonstrated between low HGS and low waist circumference (mean WC- 92.55 ± 11.92 cm, p-value 0.022). On the contrary, a study conducted by Inhwan Lee et al [75] demonstrated a significant association between low HGS and increasing WC.

Low HGS was also significantly associated with low mid-arm circumference (mean MAC- 27.63 ± 3.74 cm, p-value- 0.007). Similarly, in a study conducted by Ibegbu AO et al [75], a positive linear correlation was found between HGS and MAC.

A significant association was found between low subcutaneous fat stores and low HGS (chi square-18.046, p-0.001). Poor fat stores were found in 15% (n=15) and 0.7% (n=1) of sarcopenic and non-sarcopenic patients, respectively. Muscle wasting also showed a significant association with low HGS (chi square-7.724, p-0.021) with 26.7% (n=16) and 3.3% (n=2) of sarcopenic patients having moderate and poor muscle bulk.

No significant association was found between sarcopenic assessment and lab investigations- AST, ALT, Albumin, INR, lipid profile, or blood sugar levels. On contrary, Yin M et al [76] showed a significant association of AST/ ALT ratio with sarcopenia.

No correlation was found between the severity of the grade of fatty liver assessed by ultrasonography and sarcopenic parameters. On the contrary, the study conducted by Almeida NS et al[66] showed a positive correlation between the grade of fatty liver and sarcopenia. These findings of our study could be due to a relatively low number of patients with fatty liver grade 3.

The limitations of our study included that there is no standard definition or criteria for sarcopenia and no single parameter is definitive for diagnosis. Also, our study was an observational cross-sectional study but we need further prospective studies for defining the incidence and temporal association of causative factors of the disease. For skeletal muscle mass assessment, our study used an anthropometry-based formula but radiological modalities are better indicators of muscle mass

SUMMARY AND CONCLUSION

- The mean age of the cohort was 51.46 ± 16.78 years.
- Out of the total of 200 patients, 120 were males and 80 were females.
- Only 17 (8.5 %) patients had a history of alcohol consumption.
- The mean BMI of the cohort was 26.21 ± 5.42 kg/m^2 and the maximum number (112 patients, 56%) of patients were obese as per the Asian classification of BMI.
- The mean waist circumference and mid-arm circumference was 95.39 ± 11.49 cm and 29.16 ± 5.28 cm, respectively
- In our study, 60 patients (30%) had low hand grip strength (muscle strength), 86 (43%) patients had low SPPB (muscle performance), 13 (6.5%) patients have a high SARC-F score, and only 1 (0.5%) patient had low skeletal mass index (skeletal muscle mass).
- Sarcopenia was significantly associated with increasing age according to all parameters of sarcopenia assessment. This is in concordance with the conventional age-related definition of sarcopenia.
- A significant association was found between sarcopenia and female gender in patients with low muscle performance (SPPB) (p-value-0.001, n=51, 59.3%)
- Patients with Hypertension (p-value- 0.049) and coronary artery disease (p-value- 0.033) were significantly associated with low SPPB.
- Patients with low Hand Grip Strength had a significant association with low BMI, (p-value- 0.002, n=26, 43.3%) low waist circumference (p-value- 0.003, n=40, 66.7%), and low mid-arm circumference. (p-value- 0.017, n=48, 80%).
- A significant association was also found between low HGS and poor subcutaneous stores (p-value- 0.001) and muscle wasting (p-value- 0.021).

- no significant association was found between the severity of the grade of fatty liver and sarcopenic parameters.

CONCLUSION

Our study demonstrated that sarcopenia in liver disease is a common condition in northern India though it is underdiagnosed in clinical practice. Sarcopenia assessment is a multifactorial process with no simple and easy-to-administer universal criteria or definition for early and accurate diagnosis. The key determinants of sarcopenia are increasing age, Body Mass Index (BMI), central obesity, metabolic disorders, and other comorbid conditions. Sarcopenia is one of the risk factors for the progression of liver disease and thus causes an increase in morbidity and mortality. So, in order to improve the quality of life of the sarcopenic patient, early diagnosis followed by adequate intervention is essential.

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Sr. No.	MRD. NO.	INITIALS	AGE	SEX	OCCUPATION	FATIQUE	WEAKNESS	LETHARGY	LOOSE STOOLS	STIGMATA OF LIVER DISEASE	FEVER	OTHERS	DIABETESMELLITUS	HYPERTENSION	BRONCHIALASTHMA	HYPOTHYROIDISM	CAD	OTHERS
1	1123806	LS	27	M	BUSINESSMAN	N	N	N	N	N	N	PAINABDOMEN	N	N	N	N	N	-
2	1122416	SG	68	F	RETIRED	Y	Y	N	N	N	Y	N	Y	N	N	Y	N	-
3	1097645	SS	42	M	BUSINESSMAN	N	Y	N	N	N	Y	N	N	N	N	N	N	-
4	827339	KK	32	F	HOUSEWIFE	Y	N	N	N	N	N	PAIN ABDOMEN, HEADACHE	N	N	N	N	N	-
5	1123371	SK	59	F	HOUSEWIFE	Y	Y	N	N	N	N	N	N	N	N	N	N	-
6	627031	SRJ	83	M	RETIRED	N	Y	N	N	N	N	PAIN ABDOMEN	N	N	N	N	Y	-
7	1207538	AG	60	F	HOUSEWIFE	N	Y	N	N	N	N	N	N	N	N	N	N	-
8	1218178	AS	54	F	HOUSEWIFE	N	N	N	N	N	N	ABDOMNE DISCOMFORT	N	N	N	N	N	-
9	1027897	KK	45	F	HOUSEWIFE	N	N	N	N	N	N	SWELLING OF NECK	N	N	N	N	N	-
10	730236	BB	40	M	BUSINESSMAN	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	PSOARIASIS
11	1255067	DS	26	M	STUDENT	N	Y	N	N	N	N	N	N	N	N	N	N	-
12	690655	VM	57	F	HOUSEWIFE	N	Y	N	N	N	N	COUGH	Y	Y	N	N	N	-
13	1261169	SR	55	F	HOUSEWIFE	N	N	N	N	N	N	VOMITING	N	N	N	N	N	-
14	1153447	SK	45	M	BUSINESSMAN	N	N	N	N	N	N	DYSPEPSIA	N	Y	N	N	N	-
15	1245811	JS	38	M	FARMER	N	N	N	N	N	N	DYSPEPSIA	N	N	N	N	N	-
16	1263198	PK	47	F	HOUSEWIFE	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
17	1115245	SB	40	M	GOVERNMENT JOB	N	N	N	N	N	N	ABDOMINAL HEAVINESS	N	N	N	N	N	-
18	1262706	PK	37	F	HOUSEWIFE	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
19	1264672	DS	62	M	FARMER	N	N	N	Y	N	N	N	N	N	N	N	N	-
20	1264679	SN	33	M	BUSINESSMAN	N	N	N	N	N	N	BURNING SENSATION IN EPIGASTRIUM	N	N	N	N	N	-
21	1225716	GM	48	M	BUSINESSMAN	N	N	Y	N	N	N	N	N	N	N	Y	N	-
22	1265449	KA	62	M	BUSINESSMAN	N	N	N	Y	N	N	N	Y	Y	N	Y	N	-
23	140455	GK	40	F	HOUSEWIFE	N	N	N	N	N	N	DYSPEPSIA	N	N	N	N	N	-
24	125453	PM	30	F	GOVERNMENT JOB	N	N	N	N	N	N	DYSPEPSIA, BACKACHE	N	N	N	N	N	-
25	1265455	RK	63	F	HOUSEWIFE	N	N	N	N	N	N	DYSPEPSIA	N	N	N	N	N	-
26	1264709	SG	31	M	DRIVER	N	N	N	N	N	N	N	N	N	N	N	N	CHRONIC HEPATITIS C
27	1264662	RP	54	M	GOVERNMENT JOB	N	N	N	Y	N	N	PAIN ABDOMEN	N	N	N	N	N	-
28	1238894	S	26	M	BUSINESSMAN	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
29	1259099	KS	24	M	DRIVER	N	N	N	Y	N	N	PAIN ABDOMEN	N	N	N	N	N	-
30	1264710	RK	45	F	BUSINESSMAN	N	N	N	N	N	N	DYSPEPSIA	N	N	N	N	N	-
31	1264713	SK	46	M	BUSINESSMAN	N	N	N	Y	N	N	N	N	N	N	N	N	-
32	581651	PK	62	M	BUSINESSMAN	N	N	N	N	N	N	CONSTIPATION	N	Y	N	N	N	-
33	693001	GK	39	F	HOUSEWIFE	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
34	1280068	SS	55	M	FARMER	N	N	N	Y	N	N	N	Y	N	N	N	N	-
35	1207417	S	32	M	BUSINESSMAN	N	N	N	N	N	N	N	N	N	N	N	N	-
36	1279681	RA	29	M	GOVERNMENT JOB	N	N	N	N	N	N	CONSTIPATION	N	N	N	N	N	-
37	1280102	MD	32	F	HOUSEWIFE	N	N	N	N	N	N	VOMITING	Y	N	N	N	N	-
38	1266870	SK	69	F	HOUSEWIFE	N	N	N	N	N	N	VOMITING	N	Y	N	N	N	-
39	1281325	SS	56	F	HOUSEWIFE	N	N	N	N	N	N	RIGHT HYPOCHONDRIUM PAIN	N	N	N	N	N	-
40	1121755	HS	53	M	FARMER	N	N	N	N	N	N	PAIN ABDOMEN	N	Y	N	N	N	-
41	1270386	P	40	F	HOUSEWIFE	N	N	N	Y	N	N	PAIN ABDOMEN	N	N	N	N	N	-
42	1247424	RH	41	M	BUSINESSMAN	N	N	N	N	N	N	CONSTIPATION	N	Y	N	Y	N	-
43	1282824	SG	48	M	BUSINESSMAN	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
44	828121	SS	42	M	BUSINESSMAN	N	N	N	N	N	N	ABDOMINAL FULLNESS	N	N	N	N	N	-
45	1282869	B	50	F	HOUSEWIFE	N	N	N	Y	N	N	N	N	N	N	N	N	-
46	49618	HS	41	M	BUSINESSMAN	N	N	N	N	N	N	BURNING SENSATION IN ABDOMEN	N	N	N	N	N	-
47	1272847	SM	26	M	BUSINESSMAN	N	N	N	N	N	N	ABDOMINAL BLOATING	N	N	N	N	N	-
48	1282806	P	23	F	HOUSEWIFE	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
49	1275810	GS	54	M	BUSINESSMAN	N	N	N	N	N	N	ABDOMINAL HEAVINESS	N	N	N	N	N	-
50	1171795	SS	43	M	FARMER	N	N	N	Y	N	N	DYSPEPSIA	N	N	N	Y	N	-
51	662541	SSK	50	M	GOVERNMENT JOB	N	N	N	N	N	N	ABDOMINAL HEAVINESS	N	Y	N	N	N	-
52	1284883	SS	60	M	BUSINESSMAN	N	N	N	N	N	N	PAIN ABDOMEN	N	Y	N	N	N	-
53	1284880	SM	52	F	HOUSEWIFE	N	N	N	N	N	N	PAIN ABDOMEN	N	Y	N	Y	N	POST COVID
54	1276995	RS	43	M	BUSINESSMAN	N	N	N	N	N	N	VOMITING	N	N	N	N	N	-
55	1284313	US	45	M	FARMER	N	N	N	N	N	N	DYSPEPSIA	N	N	N	N	N	-
56	1284331	NM	30	M	BUSINESSMAN	N	N	N	N	N	N	CONSTIPATION	N	N	N	N	N	-
57	1284344	JK	52	F	GOVERNMENT JOB	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
58	1135641	VK	42	M	BUSINESSMAN	N	N	N	N	N	N	N	Y	Y	N	N	N	-
59	1285686	BS	47	M	FARMER	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
60	1285629	V	40	M	FARMER	N	N	N	N	N	N	BURNING SENSATION	N	N	N	N	N	-
61	73106	P	21	M	STUDENT	N	N	N	N	N	N	CONSTIPATION	N	N	N	N	N	-
62	120456	SS	63	M	UNEMPLOYED	N	N	N	N	N	N	DECREASED APPETITE	N	Y	N	N	N	-
63	1286306	BS	46	M	FARMER	N	N	N	N	N	N	EPIGASTRIC PAIN	Y	N	N	N	N	-
64	1286307	SS	45	M	FARMER	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
65	1286317	RG	45	M	GOVERNMENT JOB	N	N	N	N	N	N	CONSTIPATION	Y	N	N	N	N	-
66	1290879	KLC	67	M	BUSINESSMAN	N	N	N	N	N	N	PAIN ABDOMEN	N	Y	N	N	N	-
67	856063	RA	56	F	HOUSEWIFE	N	N	N	N	N	N	HEADACHE	N	Y	N	N	N	-

Sr. No.	MRD. NO.	TREATMENT HISTORY	ALCOHOL	SMOKING	ALCOHOL QUANTITIY (GM/DAY)	ALCOHOL DURATION (YEARS)	SMOKING QUANTITY	SMOKING DURATION	VEGAN	LACTO-OVO-VEGETARIAN	PESCO-VEGETARIAN	SEMI-VEGETARIAN	NON-VEGETARIAN	HR	RR	SpO2	SBP	DBP	FEVER	PALLOR	EDEMA	JAUNDICE	JVP	CYANOSIS
1	1123806	N	N	N	-	-	N	N	N	Y	N	N	N	92	20	98	110	70	N	N	N	N	N	N
2	1122416	TAB METFORMIN, ELTROXIN	N	N	-	-	N	N	N	Y	N	N	N	80	18	96	120	90	N	N	N	N	N	N
3	1097645	N	Y	N	50	20	N	N	N	N	N	N	Y	92	22	96	110	90	N	N	N	N	N	N
4	827339	N	N	N	-	-	N	N	N	Y	N	N	N	110	20	96	120	90	N	N	N	N	N	N
5	1123371	N	N	N	-	-	N	N	N	N	N	N	Y	92	22	96	110	90	N	N	N	N	N	N
6	627031	N	N	N	-	-	N	N	N	Y	N	N	N	90	20	96	130	90	N	N	N	N	N	N
7	1207538	N	N	N	-	-	N	N	N	N	N	N	Y	94	20	98	120	90	N	N	N	N	N	N
8	1218178	N	N	N	-	-	N	N	N	N	N	Y	N	74	20	98	120	90	N	N	N	N	N	N
9	1027897	N	N	N	-	-	N	N	N	Y	N	N	N	72	20	98	120	80	N	N	N	N	N	N
10	730236	N	N	N	-	-	N	N	N	Y	N	N	N	82	16	96	120	90	N	N	N	N	N	N
11	1255067	N	N	N	-	-	N	N	N	Y	N	N	N	86	20	96	120	90	N	N	N	N	N	N
12	690655	TAB METFORMIN, GLIMIPRIDE, TAB TLMISARTAN, AMLODIPINE	N	N	-	-	N	N	Y	N	N	N	N	70	20	96	120	90	N	N	N	N	N	N
13	1261169	N	N	N	-	-	N	N	Y	N	N	N	N	70	20	96	120	80	N	N	N	N	N	N
14	1153447	TAB AMLONG-MT OD	N	N	-	-	N	N	N	N	N	N	Y	64	16	98	110	70	N	N	N	N	N	N
15	1245811	N	Y	N	120	8	N	N	N	N	N	N	Y	82	20	98	120	90	N	N	N	N	N	N
16	1263198	N	N	N	-	-	N	N	N	Y	N	N	N	72	20	98	110	80	N	N	N	N	N	N
17	1115245	N	N	N	-	-	N	N	N	N	N	N	Y	64	14	99	120	90	N	N	N	N	N	N
18	1262706	N	N	N	-	-	N	N	N	N	N	N	Y	86	20	96	120	90	N	N	N	N	N	N
19	1264672	N	Y	N	80	3	N	N	N	Y	N	N	N	60	20	99	110	80	N	N	N	N	N	N
20	1264679	N	N	N	-	-	N	N	N	N	N	N	Y	76	20	96	110	80	N	N	N	N	N	N
21	1225716	TAB ELTROXIN	N	N	-	-	N	N	Y	N	N	N	N	76	20	99	110	80	N	N	N	N	N	N
22	1265449	INJ MIXTARD INSULIN 36 UNITS BD	N	N	-	-	N	N	Y	N	N	N	N	68	22	98	110	80	N	N	N	N	N	N
23	140455	N	N	N	-	-	N	N	Y	N	N	N	N	74	20	98	136	98	N	N	N	N	N	N
24	125453	N	N	N	-	-	N	N	N	N	N	N	Y	100	16	99	100	60	N	N	N	N	N	N
25	1265455	N	N	N	-	-	N	N	Y	N	N	N	N	86	20	96	110	80	N	N	N	N	N	N
26	1264709	N	N	N	-	-	N	N	N	N	N	N	Y	82	18	98	120	80	N	N	N	N	N	N
27	1264662	N	Y	N	60	3	N	N	N	N	N	N	Y	82	20	98	136	80	N	N	N	N	N	N
28	1238894	N	N	N	-	-	N	N	N	N	N	N	Y	70	16	99	110	90	N	N	N	N	N	N
29	1259099	N	N	N	-	-	N	N	N	Y	N	N	N	84	16	98	120	80	N	N	N	N	N	N
30	1264710	N	N	N	-	-	N	N	N	N	N	N	Y	78	20	98	130	70	N	N	N	N	N	N
31	1264713	N	N	N	-	-	N	N	N	N	N	N	Y	88	18	98	120	80	N	N	N	N	N	N
32	581651	TAB TELMA-AM OD	N	N	-	-	N	N	N	Y	N	N	N	72	20	98	110	70	N	N	N	N	N	N
33	693001	N	N	N	-	-	N	N	N	N	N	N	Y	68	20	96	120	90	N	N	N	N	N	N
34	1280068	INJ LANTUS 20 UNITS HS S/C	N	N	-	-	N	N	N	Y	N	N	N	98	20	98	120	90	N	N	N	N	N	N
35	1207417	N	N	N	-	-	N	N	N	N	N	N	Y	76	20	99	120	90	N	N	N	N	N	N
36	1279681	N	N	N	-	-	N	N	N	N	N	N	Y	74	20	96	110	80	N	N	N	N	N	N
37	1280102	TAB TENEPRIDE-M BD	N	N	-	-	N	N	N	N	N	N	Y	70	16	98	120	90	N	N	N	N	N	N
38	1266870	TAB AMLONG BD	N	N	-	-	N	N	N	Y	N	N	N	76	20	98	120	90	N	N	N	N	N	N
39	1281325	N	N	N	-	-	N	N	Y	N	N	N	N	76	20	98	110	80	N	N	N	N	N	N
40	1121755	TAB OLMET 40MG OD	Y	N	50	40	N	N	N	N	N	N	Y	74	20	96	110	70	N	N	N	N	N	N
41	1270386	N	N	N	-	-	N	N	Y	N	N	N	N	76	18	96	100	70	N	N	N	N	N	N
42	1247424	TAB OLMET M OD TAN ELTROXIN 25MCG OD	N	N	-	-	N	N	N	N	N	N	Y	72	20	98	130	80	N	N	N	N	N	N
43	1282824	N	Y	N	80	20	N	N	N	N	N	N	Y	86	20	98	120	90	N	N	N	N	N	N
44	828121	N	N	N	-	-	N	N	N	N	N	N	Y	72	20	96	100	80	N	N	N	N	N	N
45	1282869	N	N	N	-	-	N	N	N	Y	N	N	N	76	20	98	110	80	N	N	N	N	N	N
46	49618	N	Y	N	50	5	N	N	N	N	N	N	Y	72	20	96	110	80	N	N	N	N	N	N
47	1272847	N	N	N	-	-	N	N	N	N	N	N	Y	64	18	98	120	90	N	N	N	N	N	N
48	1282806	N	N	N	-	-	N	N	N	N	N	N	Y	82	18	96	120	80	N	N	N	N	N	N
49	1275810	N	N	N	-	-	N	N	Y	N	N	N	N	82	18	98	120	90	N	N	N	N	N	N
50	1171795	TAB ELTROXIN 25MCG OD	N	N	-	-	N	N	N	N	N	N	Y	88	18	99	120	90	N	N	N	N	N	N
51	662541	TAB OLMET 40MG OD	N	N	-	-	N	N	N	N	N	N	Y	86	20	96	110	80	N	N	N	N	N	N
52	1284883	TAB AMLONG 5 MG OD	N	N	-	-	N	N	N	Y	N	N	N	70	20	98	110	80	N	N	N	N	N	N
53	1284880	TAB ELTROXIN 100MCG OD TAB TELMA-H 40/12.5MG OD	N	N	-	-	N	N	N	Y	N	N	N	86	20	96	120	90	N	N	N	N	N	N
54	1276995	N	N	N	-	-	N	N	N	N	N	N	Y	68	20	96	120	80	N	N	N	N	N	N
55	1284313	N	N	N	-	-	N	N	N	N	N	N	Y	92	20	96	120	90	N	N	N	N	N	N
56	1284331	N	N	N	-	-	N	N	N	N	N	N	Y	64	18	96	120	90	N	N	N	N	N	N
57	1284344	N	N	N	-	-	N	N	N	Y	N	N	N	70	20	96	110	80	N	N	N	N	N	N
58	1135641	TAB TELMA 40MG OD TAB GLYCOMET 500MG OD	N	N	-	-	N	N	N	N	N	N	Y	82	20	96	110	90	N	N	N	N	N	N
59	1285686	N	N	N	-	-	N	N	N	Y	N	N	N	76	20	96	120	90	N	N	N	N	N	N
60	1285629	N	N	N	-	-	N	N	N	N	N	N	Y	82	20	98	110	80	N	N	N	N	N	N
61	73106	N	N	N	-	-	N	N	N	Y	N	N	N	76	18	98	110	80	N	N	N	N	N	N
62	120456	TAB AMLONG 5 MG OD	Y	N	120	40	N	N	N	N	N	N	Y	84	20	98	110	80	N	N	N	N	N	N
63	1286306	TAB TENEPRIDE M OD	N	N	-	-	N	N	N	Y	N	N	N	78	20	99	110	80	N	N	N	N	N	N
64	1286307	N	N	N	-	-	N	N	N	N	N	N	Y	82	20	98	120	90	N	N	N	N	N	N
65	1286317	TAB TORGLIP 50MG	N	N	-	-	N	N	N		N	N	Y	64	20	96	120	80	N	N	N	N	N	N
66	1290879	TAB RAMIPRIL 1.25MG OD	N	N	-	-	N	N	N	N	N	N	Y	82	18	98	120	80	N	N	N	N	N	N
67	856063	TAB CILNIDIPINE 10MG OD	N	N	-	-	N	N	N	N	N	N	Y	72	18	99	120	90	N	N	N	N	N	N

Sr. No.	MRD. NO.	LYMPHADENOPATHY	BODY WEIGHT	HEIGHT	BMI	WAIST CIRCUMFERENCE	HIP CIRCUMFERENCE	MID- ARM CIRCUMFERENCE	SUBCUTANEOUS FAT STORES UNDER THE EYES	BICEPS	TRICEPS	MUSCLE WASTING TEMPLE	CLAVICLE	SHOULDER	QUADRICEPS	CALF	KNEE	CNS	CVSS1	CVS S2
1	1123806	N	87	1.7	30	108	102	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
2	1122416	N	69	1.5	30.7	106	114	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
3	1097645	N	80	1.77	25.5	93	90	29	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
4	827339	N	100	1.6	39.1	117	120	36	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
5	1123371	N	64.3	1.6	25.1	65	68	27	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
6	627031	N	97	1.61	37.4	119	115	31	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
7	1207538	N	63	1.52	27.2	55	56	27	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
8	1218178	N	66	1.65	24.24	68	58	29	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
9	1027897	N	70	1.65	25.71	100	104	33	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
10	730236	N	102	1.72	34.47	90	96	31	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
11	1255067	N	80	1.77	25.53	95	99	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
12	690655	N	67	1.57	27.181	109	106	41	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
13	1261169	N	60	1.62	22.86	80	84	24	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
14	1153447	N	110	1.85	32.14	123	113	37	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
15	1245811	N	70	1.65	25.71	94	103	32	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
16	1263198	N	58	1.6	22.65	89	92	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
17	1115245	N	74	1.58	29.64	101	99	28	GOOD	GOOD	GOOD	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
18	1262706	N	70	1.6	27.34	99	101	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
19	1264672	N	92	1.75	30.04	114	122	31	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
20	1264679	N	87	1.7	30.1	110	104	33	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
21	1225716	N	110	1.68	38.97	127	121	35	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
22	1265449	N	96	1.91	26.31	126	113	35	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
23	140455	N	87	1.6	33.98	116	113	33	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
24	125453	N	92	1.59	36.4	121	122	33	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
25	1265455	N	47	1.48	21.45	84	93	24	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
26	1264709	N	91	1.77	29.04	96	97	31	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
27	1264662	N	81	1.67	29.04	110	104	29	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
28	1238894	N	68	1.64	25.28	100	106	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
29	1259099	N	77	1.73	25.72	95	96	30	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
30	1264710	N	66	1.63	24.84	103	99	29	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
31	1264713	N	81	1.72	27.37	105	104	29	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
32	581651	N	90	1.8	27.77	109	112	30	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
33	693001	N	56	1.49	25.22	102	103	28.5	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
34	1280068	N	80	1.7	27.68	97	98	31	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
35	1207417	N	115	1.75	37.55	122	118	35	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
36	1279681	N	76	1.79	23.71	90	96	28	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
37	1280102	N	60	1.58	24.03	91	106	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
38	1266870	N	68	1.67	24.38	99	101	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
39	1281325	N	85.8	1.61	33.1	107	117	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
40	1121755	N	83	1.706	28.71	111	101	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
41	1270386	N	87.5	1.58	35.05	110	115	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
42	1247424	N	79.4	1.7	27.47	99	101	30	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
43	1282824	N	82	1.798	25.59	103	101	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
44	828121	N	64	1.73	21.38	88	84	27	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
45	1282869	N	79	1.58	31.64	106	100	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
46	49618	N	111	1.77	35.43	122	111	33	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
47	1272847	N	72	1.7	24.91	90	93	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
48	1282806	N	57	1.64	21.19	88	89	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
49	1275810	N	77	1.7	26.64	110	96	29	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
50	1171795	N	101	1.7	34.94	120	116	31	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
51	662541	N	98	1.67	35.13	118	112	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
52	1284883	N	77	1.73	25.72	96	97	28	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
53	1284880	N	98	1.64	36.43	122	121	39	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
54	1276995	N	69	1.7	23.87	88	89	27	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
55	1284313	N	46	1.61	17.74	66	74	24	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
56	1284331	N	93	1.73	31.073	109	111	33	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
57	1284344	N	72	1.61	27.77	101	100	31	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
58	1135641	N	71	1.76	22.92	90	89	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
59	1285686	N	109	1.82	32.9	116	110	31	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
60	1285629	N	57	1.7	19.72	82	83	22	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
61	73106	N	74	1.67	26.53	91	88	28	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
62	120456	N	73	1.64	27.141	103	101	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
63	1286306	N	76	1.68	26.92	101	102	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
64	1286307	N	94	1.67	33.7	109	104	31	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
65	1286317	N	60	1.64	22.3	86	85	25	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
66	1290879	N	95	1.67	34.06	108	106	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
67	856063	N	83	1.6	32.42	96	94	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N

Sr. No.	MRD. NO.	CVS ANY ADDED SOUNDS	RESPIRATORY SYSTEM	INSPECTION SHAPE OF ABDOMEN	INSPECTION SKIN	INSPECTION ANY VENOUS PROMINENCE	INSPECTION VISIBLE PERISTALSIS	INSPECTION HERNIA SITES	SUPERFICIAL TEMP	SUPERFICIAL TENDERNESS	DEEP ANY LOCALISED LUMP	DEEP ORGANOMEGALY	DEEP LIVER SIZE	DEEP LIVER CONSISTENCY	DEEP LIVER MARGIN	DEEP LIVER TENDERNESS	PERCUSSION GENERAL NOTE OF ABDOMEN
1	1123806	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
2	1122416	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
3	1097645	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
4	827339	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
5	1123371	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
6	627031	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	TENDERNESS PRESENT IN HYPOGASTRIC AREA	N	N	NON PALPABLE	-	-	-	DULL
7	1207538	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	HEPATOMEGALY	PALPABLE- 2 FINGER BREATH BELOW COSTAL MARGIN	FIRM	SMOOTH	NON TENDER	DULL
8	1218178	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
9	1027897	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
10	730236	-	B/L A/E +	DISTENDED	MULTIPLE PLEOMORPHIC LESIONS- RED COLOURED WITH SILVERY SCALES	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
11	1255067	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
12	690655	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
13	1261169	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
14	1153447	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
15	1245811	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
16	1263198	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
17	1115245	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
18	1262706	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
19	1264672	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
20	1264679	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	TENDERNESS IN LEFT FLANK	N	N	NON PALPABLE	-	-	-	DULL
21	1225716	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
22	1265449	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
23	140455	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
24	125453	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
25	1265455	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
26	1264709	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
27	1264662	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
28	1238894	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
29	1259099	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
30	1264710	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
31	1264713	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
32	581651	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
33	693001	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
34	1280068	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
35	1207417	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
36	1279681	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
37	1280102	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
38	1266870	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
39	1281325	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
40	1121755	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
41	1270386	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
42	1247424	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
43	1282824	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
44	828121	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
45	1282869	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
46	49618	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
47	1272847	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
48	1282806	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
49	1275810	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
50	1171795	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
51	662541	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
52	1284883	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
53	1284880	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
54	1276995	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
55	1284313	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
56	1284331	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
57	1284344	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
58	1135641	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
59	1285686	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
60	1285629	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
61	73106	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
62	120456	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
63	1286306	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
64	1286307	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
65	1286317	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
66	1290879	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
67	856063	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL

Sr. No.	MRD. NO.	PERCUSSION UPPER BORDER OF LIVER	PERCUSSION SHIFTING DULLNESS	AUSCULTATION BOWEL SOUNDS	AUSCULTATION VENOUS HUM/ BRUIT	BILIRUBIN (TOTAL)	BILIRUBIN (DIRECT)	AST	ALT	ALP	TOTAL PROTEINS	ALBUMIN	INR	TRIGLYCERIDES	CHOLESTEROL	HDL CHOLESTEROL	LDL CHOLESTEROL	TLC	NEUTROPHILS	LYMPHOCYTES	MONOCYTES	EOSINOPHILS	BASOPHILS	HB	MCV
1	1123806	4TH SPACE	N	NORMAL	N	2.24	1.42	94	241	220	7.1	4.43	1.24	101	128	40	84	18.6	74	13.5	10.2	1	1.3	15.9	91.3
2	1122416	4TH SPACE	N	NORMAL	N	0.5	0.28	14	20	110	6.6	3.86	1.29	93	123	34	87	9.5	56.9	31	9.5	2.3	0.3	8.9	60.5
3	1097645	4TH SPACE	N	NORMAL	N	1.48	0.59	28	82	92	7.5	4.53	1.29	328	175	20	128	5.4	64.5	21.9	10.4	2.7	0.5	14.2	95.2
4	827339	5TH SPACE	N	NORMAL	N	0.41	0.18	43	75	111	7.6	4.53	1.23	110	138	40	76	10.7	53.6	35.6	7.9	2.5	0.4	12.7	84.1
5	1123371	4TH SPACE	N	NORMAL	N	0.35	0.16	22	28	100	6.8	4	1.2	156	235	53	167	7	51.4	37.2	8.9	1.8	0.7	13.7	90.3
6	627031	4TH SPACE	N	NORMAL	N	0.26	0.12	9	14	46	6.4	3.75	1.05	146	224	49	158	7.4	69.7	23.2	6.3	0.4	0.4	13.7	92.3
7	1207538	5TH SPACE	N	NORMAL	N	0.53	0.14	24	37	66	8.6	4.21	1.13	136	175	34	128	12.8	76.2	13.5	10	0.2	0.1	12.8	88.7
8	1218178	5TH SPACE	N	NORMAL	N	0.32	0.06	49	86	60	6.9	3.98	1.24	124	160	32	120	5.6	53.8	31.3	12.2	2.4	0.3	13	88.4
9	1027897	4TH SPACE	N	NORMAL	N	0.37	0.13	16	25	78	6.7	4.22	1.2	141	211	46	143	17.8	74.8	15.7	8.6	0.8	0.3	11.5	79.5
10	730236	4TH SPACE	N	NORMAL	N	1.48	0.4	51	78	177	6.4	3.66	1.12	115	121	35	70	7.7	69.2	21.9	7.6	1	0.3	11.6	90.2
11	1255067	6TH SPACE	N	NORMAL	N	1.81	0.87	11	23	80	6.2	3.59	1.46	98	109	23	58	2.2	59.2	27.8	8.9	3.3	0.8	10.2	93.5
12	690655	5TH SPACE	N	NORMAL	N	0.28	0.12	19	25	106	7.6	4.16	1.2	123	133	50	56	13.8	71.4	19.1	7.3	1.6	0.6	9.6	67
13	1261169	6TH SPACE	N	NORMAL	N	0.6	0.11	7	43	89	6.5	2.96	1.23	96	107	21	54	5.7	62.1	25.2	9.6	2.4	0.7	12.6	86.1
14	1153447	5TH SPACE	N	NORMAL	N	0.32	0.13	17	22	64	6.2	3.8	1.16	130	158	48	56	4.8	37.3	44.4	11.4	6.1	0.8	13.3	88.2
15	1245811	6TH SPACE	N	NORMAL	N	0.4	0.2	40	170	32	6.1	3.8	1.48	116	123	36	74	6.8	68.7	24.2	7.3	0.1	0.1	12.7	91.7
16	1263198	5TH SPACE	N	NORMAL	N	0.68	0.23	28	46	77	7.26	3.34	1.6	132	172	32	126	10.8	74.2	15.5	10	0.2	0.1	12.8	89
17	1115245	6TH SPACE	N	NORMAL	N	0.7	0.1	36	64	276	7.5	4.4	1.25	367	188	37	132	15.8	74.6	15.9	8.4	1	0.3	12.6	80.5
18	1262706	6TH SPACE	N	NORMAL	N	0.63	0.24	26	46	164	6.2	3.6	1.22	150	124	37	75	7.6	69.2	21.8	7.7	1	0.3	12.6	91.2
19	1264672	5TH SPACE	N	NORMAL	N	1	0.16	17	42	86	6.2	3.2	1.32	92	108	22	52	7	61.1	26.2	9.4	2.6	0.7	13.9	92.1
20	1264679	6TH SPACE	N	NORMAL	N	0.5	0.08	28	46	180	6.2	4.4	1.34	264	180	37.2	91	7.8	70.7	25.2	4.3	0.1	0.1	15.2	76
21	1225716	5TH SPACE	N	NORMAL	N	0.84	0.46	12	58	78	6.4	3.8	1.46	173	235	51	12	9.8	72.6	17.1	8	2.2	0.1	13.6	96
22	1265449	6TH SPACE	N	NORMAL	N	1.2	0.8	12	32	116	6.2	4	1.16	175	102	36	31	7.1	59	38	2	0.1	0	10.7	69.3
23	140455	6TH SPACE	N	NORMAL	N	0.59	0.15	17	34	44	8.07	4.54	1.26	140	114	33	71	9.2	76	18	4	2	0	11.8	89
24	125453	6TH SPACE	N	NORMAL	N	1	0.8	12	40	120	6.2	3	1.44	92	106	23	57	6.9	72.1	20.2	4.6	2.4	0.7	13.6	88.2
25	1265455	5TH SPACE	N	NORMAL	N	0.25	0.11	14	24	49	6.67	4.05	1.36	229	188	43	100	5.6	61.1	31.4	1.08	6.3	0.7	11.4	81.5
26	1264709	6TH SPACE	N	NORMAL	N	0.61	0.11	37	71	72	7.6	4.71	1.25	132	112	38	47	8.06	74	16	0.5	0.1	0	11.8	96
27	1264662	5TH SPACE	N	NORMAL	N	0.7	0.4	40	63	77	6.7	4.3	1.16	76	102	25	59	7.7	61.1	26.2	9.8	2.2	0.7	12.8	88.4
28	1238894	6TH SPACE	N	NORMAL	N	1	0.6	8	32	76	6	3.8	1.26	200	150	30	92	7.8	57.8	28.3	11.2	2	0.7	13.2	106
29	1259099	6TH SPACE	N	NORMAL	N	0.82	0.6	49	105	72	6.1	4	1.38	126	140	40	52	9.3	49.5	38.3	8.1	3.8	0.3	13.8	87.9
30	1264710	5TH SPACE	N	NORMAL	N	0.2	0.1	35	62	122	8.3	4.1	1.36	184	203	45	122	5.48	59	36	3	1	1	12.3	98
31	1264713	5TH SPACE	N	NORMAL	N	0.42	0.2	8	42	68	6.4	3.2	1.46	144	170	48	132	9.2	78.8	15.7	4.6	0.9	0.2	12.9	86
32	581651	6TH SPACE	N	NORMAL	N	0.53	0.1	41	89	70	8.1	3.9	1.4	97	115	40	58	4.8	50	45	2	3	0	14.8	89
33	693001	5TH SPACE	N	NORMAL	N	0.28	0.2	17	34	156	6.7	3.9	1.36	197	238	40	190	10.3	60	32	5	3	0	12.6	92.8
34	1280068	6TH SPACE	N	NORMAL	N	0.8	0.3	13	57	97	7.2	4.6	1.5	102	106	46	62	8.4	56	40	2	2	0	13.6	98
35	1207417	5TH SPACE	N	NORMAL	N	0.6	0.12	35	55	70	7.5	4.51	1.23	203	111	29	41	7	52	43	2	2	1	14.6	96
36	1279681	5TH SPACE	N	NORMAL	N	0.94	0.19	31	56	194	7.32	4.39	1.1	172	169	45	89	6.9	62	32	5	1	0	12.4	75.5
37	1280102	6TH SPACE	N	NORMAL	N	0.4	0.2	44	95	117	7.2	4	1.2	144	150	34	87	10	64.7	26.7	8.6	0	0	11.8	74.7
38	1266870	5TH SPACE	N	NORMAL	N	0.78	0.33	43	82	105	7.3	4.12	1.18	170	168	42	84	11.6	69.9	20	9	0.8	0.3	11.6	80.2
39	1281325	6TH SPACE	N	NORMAL	N	0.7	0.2	61	95	108	6.8	4.3	1.26	111	156	45	88	7.7	68.8	30	2.2	0	0	10.7	94.5
40	1121755	6TH SPACE	N	NORMAL	N	0.4	0.2	57	94	74	7.5	5	1.28	202	197	71	104	6.7	49	42	7	2	0	13.2	88
41	1270386	5TH SPACE	N	NORMAL	N	0.9	0.4	24	44	124	6.2	3.6	1.38	164	160	40	78	9.1	56.6	30.5	9.4	3	0.5	8.6	70.5
42	1247424	6TH SPACE	N	NORMAL	N	1.2	0.8	25	42	96	6.4	3.6	1.36	196	168	76	102	6.7	56.2	31.6	8.8	2.7	0.7	11.3	90.4
43	1282824	5TH SPACE	N	NORMAL	N	0.9	0.12	99	172	111	7.13	4.6	1.26	196	182	80	102	5.3	68	24.2	4.7	2.6	0.5	15.7	93.3
44	828121	5TH SPACE	N	NORMAL	N	0.5	0.3	52	102	88	6.9	3.9	1.46	183	216	43	137	5.06	57.1	38.7	4.2	1.96	0.2	15.7	88.3
45	1282869	6TH SPACE	N	NORMAL	N	0.8	0.2	20	64	88	6.2	3	1.48	108	154	44	86	7.2	68.2	30.6	2.2	0	0	11.8	102
46	49618	6TH SPACE	N	NORMAL	N	0.85	0.18	28	45	66	8.6	4.49	1.26	213	176	55	104	10.4	77.5	15	6.5	0.6	0.4	13.4	82.4
47	1272847	5TH SPACE	N	NORMAL	N	0.6	0.2	22	46	72	5.8	3.2	1.28	203	170	60	174	8.2	73.5	19	6.9	0.6	0	12.4	96
48	1282806	6TH SPACE	N	NORMAL	N	1.2	1	18	56	102	6.2	3	1.18	186	177	69	94	9.8	71.5	21	6.9	0.6	0	13.6	102
49	1275810	6TH SPACE	N	NORMAL	N	0.8	0.6	38	61	264	6.1	3.6	1.46	179	232	52	150	9.2	72.8	26	2	0.2	0	12.6	102.6
50	1171795	5TH SPACE	N	NORMAL	N	1.2	0.8	29	52	96	6	3.2	1.48	106	150	42	89	8.7	49.1	34.8	9.7	5.9	0.5	13.8	80.9
51	662541	6TH SPACE	N	NORMAL	N	0.7	0.42	38	84	82	8.2	4.79	1.26	265	202	59	96	9.1	58	33	5	4	0	15.6	78.4
52	1284883	5TH SPACE	N	NORMAL	N	0.9	0.7	45	78	92	5.6	3.2	1.24	158	194	46	103	6.6	53	4.4	2.9	0.2	0	13.2	91
53	1284880	5TH SPACE	N	NORMAL	N	1	0.12	29	45	58	7.9	4.62	1.4	156	242	63	147	6.8	71.5	21	7	0.5	0	15.6	102
54	1276995	5TH SPACE	N	NORMAL	N	0.48	0.11	22	36	106	6.2	3.87	1.12	104	152	46	82	12.3	84	12.4	3.6	0	0	15.5	90.5
55	1284313	6TH SPACE	N	NORMAL	N	0.9	0.7	16	86	92	6.1	3.6	1.42	182	170	67	90	7.6	70.5	22	6.9	0.6	0	18	94
56	1284331	6TH SPACE	N	NORMAL	N	0.6	0.1	29	66	198	5.6	2.8	1.36	186	160	86	122	9.8	56.2	31.4	9	2.7	2.7	14	96
57	1284344	5TH SPACE	N	NORMAL	N	1.2	0.9	20	46	96	8.6	4.2	1.16	240	288	51	89	5.8	46.2	46.5	7.3	0	0	11	84.7
58	1135641	6TH SPACE	N	NORMAL	N	0.56	0.24	15	46	82	7.3	4.9	1.1	109	127	52	53	5.5	57	29.6	10.2	2.7	0.5	14.3	97.1
59	1285686	5TH SPACE	N	NORMAL	N	0.91	0.76	26	48	86	6.1	4.6	1.5	186	162	64	89	8.7	73	24	1	2	0	12.6	98
60	1285629	6TH SPACE	N	NORMAL	N	0.8	0.6	22	48	84	5.8	3.8	1.26	176	166	67	87	8.6	70.5	22	6.9	0.6	0	13	82
61	73106	6TH SPACE	N	NORMAL	N	0.74	0.23	34	46	66	7.3	4.3	1.26	125	212	48	139	7.9	72	24	1	0.3	2.7	15.3	88
62	120456	5TH SPACE	N	NORMAL	N	1.2	0.8	22	48	86	7.2	4.8	1.36	164	182	42	98	9.2	51	6.4	3	0.1	0	10.8	98
63	1286306	6TH SPACE	N	NORMAL	N	0.4	0.1	19	51	36	7.2	4	1	192	230	57	134	7.95	46	40	10	4	0	16.2	87.9
64	1286307	6TH SPACE	N	NORMAL	N	0.8	0.3	28	53	99	6.2	4	1.38	176	156	84	120	8.7	56	32	5	6	0	14.4	90.4
65	1286317	5TH SPACE	N	NORMAL	N	1.6	1.3	29	48	98	5.8	3.4	1.36	120	218	40	129	6.8	74	22	1	2	1	14.1	98
66	1290879	6TH SPACE	N	NORMAL	N	0.46	0.07	26	42	86	6.5	3.48	1.02	172	184	62	84	7.6	64	26	7	3	0	9.8	88.6
67	856063	5TH SPACE	N	NORMAL	N	0.5	0.1	14	21	89	6.8	4.02	1.24	108	167	42	86	6.1	63	29	6	6	0	11.8	87.1

Sr. No.	MRD. NO.	PLATELET COUNT	UREA	CREATININE	NA+	K+	CL-	FBS	RBS	HB1Ac	HBsAg	ANTI-HCV	ANTI-HIV	ANY OTHER INVESTIGATION	HEPATIC STEATOSIS INDEX (HSI)	APRI	FIB-4 SCORE	BARD SCORE	NAFLD SCORE	GRADE OF FATTY LIVER	ANY OTHER SPECIFIC POINT	FIBROSCAN	SARC-F SCORING SYSTEM STRENGTH	SARC-F SCORING SYSTEM ASSISSTANCE IN WALKING	RISE FROM A CHAIR
1	1123806	305	34	0.86	136	4.41	96	89	119	5	NEGATIVE	NEGATIVE	NEGATIVE	-	50.5	0.8	0.54	1	-4.36	2	-	-	0	0	0
2	1122416	307	20	0.65	132	4.21	98	173	391	10.7	NEGATIVE	NEGATIVE	NEGATIVE	-	45.4	0.1	0.69	2	-1.05	1	-	-	2	1	1
3	1097645	140	31	1.29	137	4.79	97	156	138	5.7	NEGATIVE	NEGATIVE	NEGATIVE	-	48.9	0.5	0.93	0	-2.2	1	-	-	1	0	0
4	827339	359	21	0.78	138	3.8	105	106	130	5.8	NEGATIVE	NEGATIVE	NEGATIVE	TSH-1.89	55.1	0.3	0.44	1	-3.9	1	-	-	1	1	0
5	1123371	191	18	0.72	142	3.8	100	104	132	5	NEGATIVE	NEGATIVE	NEGATIVE	TSH-2.92	37.3	0.3	1.28	0	-1.48	1	-	-	2	0	1
6	627031	223	26	1.26	139	4.92	104	101	126	6.3	NEGATIVE	NEGATIVE	NEGATIVE	TSH-1.52	49.3	0.1	0.92	1	0.25	1	PROSTATOMEGALY GRADE 3	-	2	1	1
7	1207538	359	31	0.49	135	4.53	102	107	146	6.2	NEGATIVE	NEGATIVE	NEGATIVE	-	41.5	0.2	0.66	0	-3.7	1	-	-	1	0	1
8	1218178	202	13	0.63	144	4.14	106	116	120	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	38.1	0.6	1.41	0	-2.1	2	-	-	1	0	0
9	1027897	350	30	0.56	138	4.31	99	126	134	6.4	NEGATIVE	NEGATIVE	NEGATIVE	TSH- 0.610	40.2	0.1	0.42	0	-4.26	2	-	-	2	0	0
10	730236	227	10	0.57	138	3.6	103	101	120	6.1	NEGATIVE	NEGATIVE	NEGATIVE	-	43.6	0.7	1.32	1	-1.54	3	-	-	0	0	0
11	1255067	376	23	0.43	139	3.81	103	98	120	4.1	NEGATIVE	NEGATIVE	NEGATIVE	TSH-0677	42.3	0.1	0.15	0	-5.23	2	-	-	0	0	0
12	690655	504	16	0.74	135	4.42	98	193	235	6.8	NEGATIVE	NEGATIVE	NEGATIVE	-	41.7	0.1	0.43	1	-4.43	3	-	-	0	0	0
13	1261169	293	18	0.74	138	3.75	98	118	124	3.2	NEGATIVE	NEGATIVE	NEGATIVE	-	74	0.1	0.2	0	-3.09	2	-	-	0	1	1
14	1153447	157	28	0.63	139	3.9	88	101	122	4.8	NEGATIVE	NEGATIVE	NEGATIVE	TSH-1.84	42.5	0.3	1.04	1	-0.79	2	-	-	0	0	0
15	1245811	221	28	0.74	141	4.64	101	98	112	5.8	POSITIVE	NEGATIVE	NEGATIVE	-	59.7	0.5	0.53	0	-3	2	-	-	0	0	0
16	1263198	320	28	1.1	139	4.2	104	110	124	4.3	NEGATIVE	NEGATIVE	NEGATIVE	-	37.8	0.2	0.61	0	-3.57	1	-	-	1	0	1
17	1115245	306	12	1.2	146	3.4	103	96	110	5.6	NEGATIVE	NEGATIVE	NEGATIVE	TSH-3.4	43.9	0.3	0.59	1	-3.73	2	-	-	0	0	0
18	1262706	225	20	0.89	140	3.77	108	96	126	4.3	NEGATIVE	NEGATIVE	NEGATIVE	TSH-3.15	43.5	0.3	0.64	0	-2.48	1	-	-	0	0	0
19	1264672	272	46	0.94	142	4.6	108	90	106	4.2	NEGATIVE	NEGATIVE	NEGATIVE	-	49.8	0.2	0.6	1	-1.8	2	-	-	0	0	0
20	1264679	320	24	0.8	141	4.03	102	98	116	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	43.2	0.2	0.43	1	-4.09	2	-	-	1	0	1
21	1225716	280	46	0.9	142	3.9	96	96	112	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	64.3	0.1	0.38	1	-3.79	3	-	-	0	0	0
22	1265449	251	36	0.8	140	3.7	100	90	122	4.6	NEGATIVE	NEGATIVE	NEGATIVE	TSH-4.10	42.5	0.2	0.79	1	-2.25	3	-	S3F0	0	0	0
23	140455	180	26	0.8	139	4.6	101	98	108	4.9	POSITIVE	NEGATIVE	NEGATIVE	-	51	0.2	0.65	1	-1.84	2	-	S3F0	0	0	0
24	125453	323	12	1.1	141	3.9	102	99	118	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	35.1	0.1	0.32	1	-3.03	2	-	-	1	1	1
25	1265455	430	29	1.1	138	4.2	106	98	106	4.8	NEGATIVE	NEGATIVE	NEGATIVE	TSH-0.80	36.3	0.1	0.42	0	-6.74	1	-	-	1	0	1
26	1264709	282	38	1.1	142	4.2	108	92	102	6	NEGATIVE	NEGATIVE	NEGATIVE	-	44.4	0.3	0.48	1	-4.06	1	-	S3F0	0	0	0
27	1264662	303	36	0.9	139	3.68	98	94	106	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	41.6	0.3	0.9	1	-3.1	1	-	-	0	0	0
28	1238894	360	18	0.96	142	4.1	96	86	102	5.7	NEGATIVE	NEGATIVE	NEGATIVE	-	57.9	0.1	0.1	0	-6.73	1	-	-	0	0	0
29	1259099	315	17	0.63	143	4.1	90	90	92	4.6	NEGATIVE	NEGATIVE	NEGATIVE	TSH-2.00	42.9	0.4	0.36	0	-6.03	2	-	-	2	1	0
30	1264710	230	24	1.1	128	3.8	100	98	106	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	41	0.4	0.87	0	-2.96	2	-	S3F0	0	0	0
31	1264713	302	24	0.8	142	4.1	100	96	102	6	NEGATIVE	NEGATIVE	NEGATIVE	-	69.3	0.1	0.19	0	-3.25	2	-	-	0	0	0
32	581651	208	9	1.18	134	4.22	100	98	116	5.4	NEGATIVE	NEGATIVE	NEGATIVE	TSH-1.51	45.1	0.5	1.3	0	-1.59	1	-	S3F0	0	0	0
33	693001	189	22	0.58	139	4.66	102	96	101	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	43.2	0.2	0.6	0	-2.4	1	-	-	0	0	0
34	1280068	268	20	1.1	132	3.8	101	92	108	11.3	NEGATIVE	NEGATIVE	NEGATIVE	-	64.8	0.1	0.35	1	-3.33	2	-	-	0	0	0
35	1207417	232	32	0.9	139	4.2	92	92	102	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	50	0.4	0.65	1	-4.51	2	-	S3F0	0	0	1
36	1279681	168	22	0.9	138	4.8	100	97	102	5.8	NEGATIVE	NEGATIVE	NEGATIVE	TSH-1.03	38.2	0.5	0.72	2	-2.91	1	-	-	0	0	0
37	1280102	242	21	0.6	135	4	101	96	102	9.2	NEGATIVE	NEGATIVE	NEGATIVE	TSH- 3.95	45.3	0.5	0.57	1	-3.56	1	-	-	0	0	0
38	1266870	311	8	0.54	140	3.37	104	98	102	6.1	NEGATIVE	NEGATIVE	NEGATIVE	-	41.6	0.3	1.05	0	-3.07	2	-	S3F0	1	1	1
39	1281325	234	28	1.36	141	4.1	97	90	91	4.3	NEGATIVE	NEGATIVE	NEGATIVE	-	47.6	0.7	1.5	1	-1.74	2	-	-	0	0	0
40	1121755	195	10	0.8	147	4.2	99	95	101	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	41.9	0.7	1.6	1	-2.18	2	-	S3F0	0	0	0
41	1270386	355	40	0.78	142	4.6	102	74	75	4.4	NEGATIVE	NEGATIVE	NEGATIVE	TSH-3.26	51.7	0.2	0.41	1	-3.35	2	-	-	1	1	0
42	1247424	150	26	1.12	138	4.2	92	98	129	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	40.9	0.4	1.05	0	-1.31	1	-	-	0	0	0
43	1282824	449	14	0.85	136	4.2	96	98	102	6.1	NEGATIVE	NEGATIVE	NEGATIVE	-	39.5	0.6	0.81	0	-5.8	1	-	-	0	0	0
44	828121	190	27	0.86	140	4.1	96	96	99	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	37.1	0.7	1.14	0	-2.69	2	-	-	0	0	0
45	1282869	304	40	1.2	128	4.2	102	98	102	5.8	NEGATIVE	NEGATIVE	NEGATIVE	TSH-3.73	59.2	0.2	0.41	1	-2.77	2	-	-	0	0	0
46	49618	321	18	0.88	142	4.01	105	97	108	5.9	NEGATIVE	NEGATIVE	NEGATIVE	-	48.3	0.2	0.53	1	-3.35	3	-	S3F0	0	0	0
47	1272847	238	40	1.1	146	3.92	96	90	98	6.4	NEGATIVE	NEGATIVE	NEGATIVE	-	41.6	0.2	0.35	0	-3.1	2	-	-	0	0	0
48	1282806	328	16	0.8	138	4.9	87	96	101	4.3	NEGATIVE	NEGATIVE	NEGATIVE	-	48.1	0.1	0.17	0	-4.78	1	-	-	0	1	0
49	1275810	281	42	0.8	139	4.8	96	98	102	4.2	NEGATIVE	NEGATIVE	NEGATIVE	-	39.5	0.3	0.93	0	-2.59	3	-	-	0	1	0
50	1171795	193	42	0.94	135	4.2	98	91	106	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	49.6	0.4	0.9	1	-0.83	3	-	S4F0	0	0	0
51	662541	257	20	0.95	136	4	100	86	96	4.3	NEGATIVE	NEGATIVE	NEGATIVE	-	52.8	0.4	0.81	1	-2.5803	2	-	-	0	0	0
52	1284883	420	20	1.2	139	4.2	90	82	102	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	49.6	0.3	0.73	0	-4.04	2	-	-	0	0	0
53	1284880	324	26	0.9	139	3.9	96	101	112	6	NEGATIVE	NEGATIVE	NEGATIVE	-	50.8	0.2	0.69	1	-2.95	3	-	-	1	0	0
54	1276995	333	22	1.02	142	4.6	103	96	102	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	37	0.2	0.47	0	-4.12	1	-	-	1	0	0
55	1284313	265	48	0.7	140	4.1	92	96	108	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	60	0.2	0.29	0	-3.98	2	-	-	0	0	0
56	1284331	263	26	1	138	4.8	90	98	102	5.9	NEGATIVE	NEGATIVE	NEGATIVE	-	49.3	0.3	0.41	1	-2.48	2	-	-	0	0	0
57	1284344	206	36	1.6	138	4.1	100	92	108	6.2	NEGATIVE	NEGATIVE	NEGATIVE	-	48.2	0.2	0.74	0	-2.16	2	-	-	1	0	0
58	1135641	154	35	0.79	137	3.99	107	96	105	5.3	NEGATIVE	NEGATIVE	NEGATIVE	-	49.5	0.2	0.6	1	-2.88	3	-	-	1	0	0
59	1285686	198	36	0.9	142	3.8	86	102	114	5.9	NEGATIVE	NEGATIVE	NEGATIVE	-	47.7	0.3	0.89	1	-1.92	2	-	-	0	0	0
60	1285629	245	22	0.7	136	4.5	92	92	106	5.7	NEGATIVE	NEGATIVE	NEGATIVE	-	37.2	0.2	0.52	0	-3.58	2	-	-	0	0	0
61	73106	220	28	1	139	4.2	96	93	102	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	37.4	0.4	0.48	0	-3.37	1	-	-	0	0	0
62	120456	483	29	0.4	142	3.9	98	96	102	6.2	NEGATIVE	NEGATIVE	NEGATIVE	-	44.6	0.1	0.41	0	-5.79	1	-	-	0	0	0
63	1286306	217	31	0.77	136	4	98	143	168	11.6	NEGATIVE	NEGATIVE	NEGATIVE	-	50.4	0.2	0.56	1	-1.42	1	-	-	0	0	0
64	1286307	278	19	0.7	137	3.8	99	101	108	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	48.8	0.3	0.62	1	-2.57	1	-	-	1	0	0
65	1286317	237	48	0.7	136	4.4	90	96	112	5.9	NEGATIVE	NEGATIVE	NEGATIVE	-	37.5	0.3	0.79	1	-2.64	1	-	-	0	0	0
66	1290879	341	46	1.2	130	4.1	98	102	108	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	47	0.2	0.79	1	-2.11	2	-	-	0	0	0
67	856063	275	36	0.7	142	4	104	92	96	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	46.4	0.1	0.62	1	-2.12	1	-	-	1	0	0

Sr. No.	MRD. NO.	CLIMB STAIRS	FALLS	SARC-F TOTAL SCORE	APPENDICULAR SKELETAL MUSCLE MASS (ASM)	SKELETAL MUSCLE INDEX (SMI)	HAND GRIP STRENGTH1	HAND GRIP STRENGTH2	HAND GRIP STRENGTH3	HAND GRIP STRENGTH LEFT HAND1	HAND GRIP STRENGTH LEFT HAND2	HAND GRIP STRENGTH LEFT HAND3	HAND GRIP STRENGTH MAXIMUM READING	SHORT PHYSICAL PERFORMANCE BATTERY (SPPB) SCORE	BALANCE TEST FEET TOGETHER	BALANCE TEST SEMI TANDEM POSITION	BALANCE TEST TANDEM POSITION	8 FEET WALK TEST	TOTAL SPPB TEST SCORE
1	1123806	0	0	0	38.834	1.29	31	30	30	28	26	26	31	4	1	1	2	4	12
2	1122416	1	1	6	17.03	0.55	14	12	12	10	12	10	14	1	1	0	0	2	4
3	1097645	0	0	1	30.904	1.2119	42	40	40	48	46	44	48	3	1	1	2	3	10
4	827339	0	0	2	28.85	0.73	24	22	24	22	20	26	26	1	1	1	2	2	7
5	1123371	1	0	4	29.042	1.157	12	12	10	20	22	18	22	1	1	1	1	2	6
6	627031	2	0	6	29.588	0.79	26	28	28	24	22	22	28	0	1	0	0	1	2
7	1207538	0	0	2	16.448	0.604	14	12	14	10	12	10	14	1	1	1	1	1	5
8	1218178	0	0	1	18.81	0.776	22	20	22	20	18	18	22	2	1	1	2	2	8
9	1027897	0	0	2	20.55	0.799	22	20	24	18	18	20	24	1	1	1	2	1	6
10	730236	0	0	0	36.07	1.046	34	34	32	30	32	30	34	3	1	1	2	1	8
11	1255067	0	0	0	25.878	1.01	46	48	44	36	38	38	48	3	1	1	2	3	10
12	690655	0	0	0	18.108	0.666	10	8	10	8	8	6	10	4	1	1	2	3	11
13	1261169	1	0	3	16.986	0.743	16	14	14	12	10	12	16	2	1	1	1	1	6
14	1153447	0	0	0	38.56	1.99	60	58	62	50	58	52	62	2	1	1	2	4	10
15	1245811	0	0	0	27.93	1.086	40	44	38	40	36	38	44	1	1	1	2	2	7
16	1263198	1	0	3	17.13	0.75	12	10	8	12	6	10	12	1	1	1	2	3	8
17	1115245	0	0	0	28.17	0.95	40	32	28	28	38	32	40	2	1	1	2	2	8
18	1262706	0	0	0	21.04	0.76	32	30	28	22	18	20	32	2	1	1	2	3	9
19	1264672	0	0	0	31.79	1.05	32	28	28	38	38	36	38	2	1	1	2	4	10
20	1264679	1	0	3	32.98	1.09	38	40	38	48	50	52	52	4	1	1	2	4	12
21	1225716	1	0	1	28.17	0.7228	32	32	30	20	26	28	32	2	1	1	2	4	10
22	1265449	0	0	0	27.34	1.039	26	24	26	18	18	20	26	1	1	1	1	4	8
23	140455	2	0	2	24.88	0.732	26	24	20	26	22	20	26	3	1	1	2	2	9
24	125453	1	0	4	27.04	0.742	12	12	6	8	12	12	12	2	1	1	2	4	10
25	1265455	1	0	3	11.93	0.556	12	10	12	12	12	8	12	3	1	1	2	2	9
26	1264709	0	0	0	34.68	1.194	64	62	62	60	58	54	64	3	1	1	2	3	10
27	1264662	1	0	1	29.43	1.013	30	28	32	38	38	36	38	3	1	1	2	4	11
28	1238894	1	0	1	28.536	1.0128	58	56	52	58	58	58	58	4	1	1	2	4	12
29	1259099	1	1	5	31.63	1.22	34	30	28	26	32	24	34	1	1	1	1	3	7
30	1264710	0	0	0	19.504	0.7851	24	16	20	24	26	24	26	3	1	1	2	4	11
31	1264713	0	0	0	30.37	1.109	50	44	38	38	28	28	50	4	1	1	2	3	11
32	581651	0	0	0	31.63	1.1389	38	48	46	40	42	40	48	3	1	1	2	4	11
33	693001	0	0	0	16.56	0.6566	6	4	6	6	2	6	6	2	1	1	1	2	7
34	1280068	0	0	0	29.09	1.05	20	24	22	26	20	22	26	3	1	1	2	3	10
35	1207417	0	0	1	40.99	1.091	28	28	26	40	42	38	42	1	1	1	2	2	7
36	1279681	0	0	0	31.4	1.32	42	46	46	36	32	30	46	2	1	1	2	3	9
37	1280102	1	0	1	18.92	0.787	6	4	4	14	12	8	14	2	1	1	2	3	9
38	1266870	2	0	5	17.95	0.736	2	4	4	6	4	4	6	2	1	1	1	2	7
39	1281325	0	0	0	23.1	0.6978	14	14	14	20	18	18	20	3	1	1	2	4	11
40	1121755	0	0	0	30.29	1.05	32	26	22	30	38	36	38	2	1	1	2	4	10
41	1270386	2	0	4	24.85	0.73	24	22	22	24	24	22	24	2	1	1	1	2	7
42	1247424	0	0	0	30.23	1.1	40	34	28	38	40	42	42	4	1	1	2	4	12
43	1282824	0	0	0	30.96	1.21	62	60	58	50	48	52	62	3	1	1	2	3	10
44	828121	0	0	0	26.7	1.248	46	48	46	48	40	38	48	3	1	1	2	4	11
45	1282869	0	0	0	21.8	0.689	18	13	18	8	10	12	18	2	1	1	2	2	8
46	49618	0	0	0	38.574	1.088	64	62	66	64	60	66	66	3	1	1	2	4	11
47	1272847	0	0	0	29.5	1.18	50	48	50	46	44	42	50	4	1	1	2	4	12
48	1282806	1	0	2	19.54	0.92	2	4	2	8	4	6	8	2	1	1	2	3	9
49	1275810	1	0	2	28.08	1.05	18	16	16	18	20	14	20	1	1	1	1	2	6
50	1171795	1	0	1	35.404	1.013	48	50	50	48	46	50	50	3	1	1	2	3	10
51	662541	0	0	0	33.73	0.96	52	50	48	48	46	50	52	4	1	1	2	4	12
52	1284883	0	0	0	28.09	1.092	28	26	30	20	18	24	30	3	1	1	2	4	11
53	1284880	1	0	2	26.71	0.733	30	30	28	18	18	18	30	2	1	1	2	2	8
54	1276995	0	0	1	27.58	1.155	38	38	40	32	30	32	40	4	1	1	2	3	11
55	1284313	0	0	0	21.06	1.187	14	20	20	12	14	16	20	3	1	1	2	3	10
56	1284331	0	0	0	34.944	1.127	30	38	42	40	42	38	42	4	1	1	2	4	12
57	1284344	0	0	1	20.122	0.72	12	10	10	4	6	8	12	2	1	1	2	2	8
58	1135641	0	0	1	28.636	1.249	40	42	40	38	38	36	42	4	1	1	2	4	12
59	1285686	0	0	0	37.88	1.151	38	40	36	42	38	40	42	3	1	1	1	4	10
60	1285629	1	0	1	24.948	1.265	20	18	16	20	18	20	20	3	1	1	2	2	9
61	73106	0	0	0	30.64	1.154	38	36	40	36	40	38	40	4	1	1	2	4	12
62	120456	0	0	0	25.594	0.94	22	22	20	22	24	24	24	3	1	1	2	2	9
63	1286306	0	0	0	28.836	1.071	48	50	48	46	42	46	50	2	1	1	2	2	8
64	1286307	0	0	1	33.246	0.98	50	52	50	50	50	48	52	4	1	1	2	3	11
65	1286317	0	0	0	24.72	1.1086	28	28	28	24	18	18	28	4	1	1	2	4	12
66	1290879	0	0	0	31.34	0.92	32	30	32	30	26	28	32	3	1	1	2	4	11
67	856063	1	0	2	22.35	0.689	28	26	28	24	22	22	28	2	1	1	2	2	8

Sr. No.	MRD. NO.	INITIALS	AGE	SEX	OCCUPATION	FATIQUE	WEAKNESS	LETHARGY	LOOSE STOOLS	STIGMATA OF LIVER DISEASE	FEVER	OTHERS	DIABETESMELLITUS	HYPERTENSION	BRONCHIALASTHMA	HYPOTHYROIDISM	CAD	OTHERS
68	1302374	APS	37	M	BUSINESSMAN	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
69	1302454	SI	35	F	HOUSEWIFE	N	N	N	Y	N	N	N	N	N	N	N	N	-
70	3754	RK	51	M	FARMER	Y	N	Y	N	N	N	N	N	N	N	N	N	-
71	1207480	BS	47	M	FARMER	N	N	N	N	N	N	CONSTIPATION	N	N	N	N	N	-
72	1304237	JK	62	F	HOUSEWIFE	N	N	N	Y	N	N	N	N	N	N	N	N	-
73	1309695	RS	44	M	BUSINESSMAN	Y	N	N	Y	N	N	N	N	N	N	N	N	-
74	1310649	JG	60	M	BUSINESSMAN	N	N	N	N	N	N	CONSTIPATION	N	N	N	N	N	-
75	1163548	SPS	48	M	BUSINESSMAN	N	N	N	N	N	N	PAIN ABDOMEN	N	Y	N	N	N	-
76	1311662	SM	57	F	HOUSEWIFE	N	Y	N	N	N	N	N	N	N	N	N	N	-
77	1301744	OP	67	M	BUSINESSMAN	N	Y	N	Y	N	N	N	N	N	N	N	N	-
78	1312474	HS	28	M	FARMER	N	N	N	N	N	N	CONSTIPATION	N	N	N	N	N	-
79	1310979	IS	61	M	RETIRED	N	N	N	Y	N	N	N	N	N	N	N	N	-
80	1317467	PKS	73	M	BUSINESSMAN	N	N	N	N	N	N	CHEST PAIN	N	N	N	N	N	OLD TREATED KOCH
81	40939	HK	78	M	FARMER	N	N	Y	Y	N	N	N	N	N	N	N	N	-
82	1228056	D	72	M	RETIRED	N	N	N	N	N	N	GENERALISED BODY ACHES	N	Y	N	N	N	-
83	1317400	GS	72	M	FARMER	N	Y	N	N	N	N	N	N	N	N	N	N	-
84	1317299	OP	55	M	GOVERNMENT JOB	N	N	N	N	N	N	FEVER	N	N	N	N	N	-
85	1317436	AS	49	F	HOUSEWIFE	N	Y	N	N	N	N	N	N	N	N	Y	N	-
86	144211	BR	86	M	RETIRED	N	N	Y	Y	N	N	N	N	N	N	N	N	-
87	1322993	NPS	50	M	BUSINESSMAN	N	N	N	Y	N	N	N	N	N	N	Y	N	-
88	1323287	IB	71	F	HOUSEWIFE	N	N	N	N	N	N	HEADACHE	N	N	N	N	N	-
89	1280738	J	73	M	RETIRED	N	N	N	N	N	N	FEVER	N	Y	N	N	N	-
90	1323327	S	45	F	HOUSEWIFE	N	N	N	Y	N	N	N	N	N	N	N	N	-
91	193918	SA	36	F	HOUSEWIFE	N	N	N	N	N	N	FEVER	N	N	N	N	N	-
92	1323313	HS	65	M	FARMER	N	N	N	N	N	N	CONSTIPATION	N	N	N	N	N	OLD TREATED KOCH
93	1323011	VB	72	F	HOUSEWIFE	N	N	N	Y	N	N	N	Y	Y	N	N	N	-
94	1325935	JR	60	M	RETIRED	N	N	N	N	N	N	VOMITING	N	N	N	N	N	-
95	1310439	US	23	M	STUDENT	Y	Y	N	N	N	N	N	N	N	N	N	N	-
96	1183845	GK	65	F	HOUSEWIFE	N	N	N	N	N	N	FEVER	N	Y	N	N	N	-
97	1160499	S	25	F	STUDENT	N	N	N	N	N	N	FEVER, PAIN ABDOMEN	N	N	N	N	N	-
98	206046	OP	53	M	BUSINESSMAN	N	N	N	N	N	N	VOMITING	N	N	N	N	N	-
99	1319319	S	65	M	RETIRED	N	Y	Y	N	N	N	N	N	N	N	N	N	-
100	5163	RK	31	F	NURSE	N	N	N	Y	N	N	N	N	N	N	N	N	-
101	1329573	TD	80	F	HOUSEWIFE	N	N	N	N	N	N	LOSS OF APETITE	N	Y	N	N	N	OLD TREATED KOCH
102	1319187	OP	70	M	RETIRED	N	N	N	N	N	N	FEVER, COUGH	N	N	N	N	N	-
103	1325755	DD	61	F	HOUSEWIFE	N	N	N	N	N	N	FEVER	N	Y	N	Y	N	-
104	849466	SS	47	M	FARMER	Y	Y	N	N	N	N	N	N	N	N	N	N	-
105	1328761	DS	62	M	RETIRED	Y	Y	N	Y	N	N	N	N	N	N	N	N	-
106	1311985	CK	34	F	HOUSEWIFE	N	N	N	N	N	N	LOSS OF APETITE	N	N	N	N	N	-
107	1323320	SS	74	M	FARMER	N	N	N	N	N	N	COUGH	N	N	N	N	N	-
108	1313135	BR	55	M	BUSINESSMAN	N	N	N	N	N	N	FEVER	N	N	N	N	N	-
109	1327428	SP	55	F	HOUSEWIFE	Y	Y	Y	N	N	N	N	N	N	N	N	N	-
110	1327509	PS	34	M	FARMER	N	N	N	Y	N	N	N	N	N	N	N	N	-
111	1327381	SK	32	M	BUSINESSMAN	N	N	N	N	N	N	VOMITING	N	N	N	N	N	-
112	1327975	GSG	18	M	STUDENT	N	N	N	Y	N	N	N	N	N	N	N	N	-
113	1328154	SK	63	M	BUSINESSMAN	N	N	N	N	N	N	SHORTNESS OF BREATH	N	Y	N	N	N	-
114	1229536	KK	83	F	HOUSEWIFE	Y	Y	N	N	N	N	N	Y	Y	N	N	N	-
115	1328123	HS	60	M	RETIRED	N	N	N	Y	N	N	N	N	N	N	N	N	-
116	1328080	HR	64	M	RETIRED	N	N	N	N	N	N	FEVER	N	N	N	N	N	-
117	1229040	DP	82	M	RETIRED	N	N	N	Y	N	N	N	N	N	N	N	Y	-
118	1332272	DS	75	M	RETIRED	N	N	N	N	N	N	FEVER	N	N	N	N	N	OLD TREATED KOCH
119	1134568	SP	78	M	BUSINESSMAN	N	N	N	N	N	N	PAIN ABDOMEN	N	Y	N	N	Y	-
120	1330271	TD	32	M	FARMER	N	N	N	N	N	N	FEVER	N	N	N	N	N	-
121	1317376	AS	51	M	BUSINESSMAN	Y	Y	N	N	N	N	N	N	N	N	N	N	-
122	1335982	BS	45	M	FARMER	N	Y	Y	N	N	N	SHORTNESS OF BREATH	N	N	N	N	N	-
123	1335938	GD	63	F	HOUSEWIFE	N	N	N	N	N	N	PAIN ABDOMEN	N	Y	N	Y	N	OLD TREATED KOCH
124	1335962	D	29	F	STUDENT	N	N	N	N	N	N	FEVER	N	N	N	N	N	-
125	1338553	NS	40	F	HOUSEWIFE	Y	Y	N	N	N	N	N	N	N	N	N	N	OLD TREATED KOCH
126	1258966	GS	80	M	RETIRED	Y	Y	N	Y	N	N	N	N	Y	N	N	N	OLD TREATED KOCH
127	899988	PK	41	M	BUSINESSMAN	N	N	N	N	N	Y	PAIN ABDOMEN	N	N	N	N	N	-
128	1339813	GK	48	F	HOUSEWIFE	Y	Y	N	N	N	N	N	N	N	N	Y	N	-
129	1279948	PL	70	M	RETIRED	N	N	N	Y	N	N	N	Y	Y	N	N	N	-
130	1338829	JS	85	M	FARMER	N	N	N	N	N	N	PRODUCTIVE COUGH	N	N	N	N	N	OLD TREATED KOCH
131	1338584	MS	21	M	STUDENT	N	N	N	N	N	Y	N	N	N	N	N	N	-
132	1285617	SS	21	M	STUDENT	N	N	N	N	N	N	VOMITING	N	N	N	N	N	-
133	1337163	SD	80	F	HOUSEWIFE	N	Y	N	N	N	N	N	N	Y	N	N	N	-
134	1339885	BS	47	M	FARMER	Y	Y	N	N	N	N	JOINT PAINS	N	Y	N	N	N	-
135	1317574	HK	85	F	HOUSEWIFE	Y	Y	N	N	N	N	N	Y	Y	N	N	N	-
136	1227045	VM	54	F	HOUSEWIFE	Y	Y	N	N	N	N	NAUSEA	N	N	N	N	N	-
137	1340022	RS	40	F	HOUSEWIFE	N	N	N	N	N	N	NAUSEA, VOMITING	N	N	N	N	N	-
138	1344452	SK	56	F	HOUSEWIFE	N	N	N	Y	N	N	VOMITING	N	Y	N	N	N	-
139	1343955	ST	65	M	BUSINESSMAN	N	N	N	Y	N	N	N	N	Y	N	Y	N	-

Sr. No.	MRD. NO.	TREATMENT HISTORY	ALCOHOL	SMOKING	ALCOHOL QUANTITIY (GM/DAY)	ALCOHOL DURATION (YEARS)	SMOKING QUANTITY	SMOKING DURATION	VEGAN	LACTO-OVO-VEGETARIAN	PESCO-VEGETARIAN	SEMI-VEGETARIAN	NON-VEGETARIAN	HR	RR	SpO2	SBP	DBP	FEVER	PALLOR	EDEMA	JAUNDICE	JVP	CYANOSIS
68	1302374	N	N	N	-	-	N	N	N	N	N	N	Y	76	20	98	110	80	N	N	N	N	N	N
69	1302454	N	N	N	-	-	N	N	N	N	N	N	Y	80	18	95	110	90	N	N	N	N	N	N
70	3754	N	N	N	-	-	N	N	N	Y	N	N	N	70	18	98	120	90	N	N	N	N	N	N
71	1207480	N	N	N	-	-	N	N	N	N	N	N	Y	116	18	98	120	90	N	N	N	N	N	N
72	1304237	N	N	N	-	-	N	N	N	N	N	N	Y	80	18	96	120	90	N	N	N	N	N	N
73	1309695	N	N	N	-	-	N	N	N	N	N	N	Y	68	18	98	110	80	N	N	N	N	N	N
74	1310649	N	N	N	-	-	N	N	N	Y	N	N	N	74	20	98	120	80	N	N	N	N	N	N
75	1163548	TAB TELMA- AM OD	N	N	-	-	N	N	N	N	N	N	Y	84	20	96	110	80	N	N	N	N	N	N
76	1311662	N	N	N	-	-	N	N	N	Y	N	N	N	76	18	99	110	80	N	N	N	N	N	N
77	1301744	N	N	N	-	-	N	N	N	N	N	N	Y	84	18	96	110	80	N	N	N	N	N	N
78	1312474	N	N	N	-	-	N	N	N	Y	N	N	N	82	18	96	120	90	N	N	N	N	N	N
79	1310979	N	N	N	-	-	N	N	N	N	N	N	Y	82	20	98	120	90	N	N	N	N	N	N
80	1317467	N	N	N	-	-	N	N	N	N	N	N	Y	96	20	98	120	90	N	N	N	N	N	N
81	40939	N	N	N	-	-	N	N	N	Y	N	N	N	85	20	98	120	80	N	N	N	N	N	N
82	1228056	TAB TELMA 40MG OD	N	N	-	-	N	N	N	N	N	N	Y	84	18	98	110	80	N	N	N	N	N	N
83	1317400	N	N	N	-	-	N	N	N	Y	N	N	N	72	18	98	120	90	N	N	N	N	N	N
84	1317299	N	N	N	-	-	N	N	N	N	N	N	Y	98	16	98	120	90	N	N	N	N	N	N
85	1317436	TAB ELTROXIN 50 MCG	N	N	-	-	N	N	N	Y	N	N	N	80	18	97	120	90	N	N	N	N	N	N
86	144211	N	N	N	-	-	N	N	N	N	N	N	Y	72	20	96	120	90	N	N	N	N	N	N
87	1322993	TAB ELTROXIN 25MCG OD	N	N	-	-	N	N	N	N	N	N	Y	72	18	96	120	90	N	N	N	N	N	N
88	1323287	N	N	N	-	-	N	N	N	Y	N	N	N	80	18	98	110	80	N	N	N	N	N	N
89	1280738	TAB TELMA 40MG OD	N	N	-	-	N	N	N	Y	N	N	N	68	20	98	110	80	N	N	N	N	N	N
90	1323327	N	N	N	-	-	N	N	N	N	N	N	Y	68	20	96	120	90	N	N	N	N	N	N
91	193918	N	N	N	-	-	N	N	N	N	N	N	Y	92	16	98	120	90	N	N	N	N	N	N
92	1323313	N	N	N	-	-	N	N	N	N	N	N	Y	64	18	98	110	80	N	N	N	N	N	N
93	1323011	TAB METFORMIN 500MG BD TAB TELMA AM 40/5 OD	N	N	-	-	N	N	N	Y	N	N	N	82	20	96	110	80	N	N	N	N	N	N
94	1325935	N	N	N	-	-	N	N	N	Y	N	N	N	92	18	98	110	80	N	N	N	N	N	N
95	1310439	N	N	N	-	-	N	N	N	N	N	N	Y	78	16	98	120	90	N	N	N	N	N	N
96	1183845	TAB CILNIDIPINE 10MG OD	N	N	-	-	N	N	N	Y	N	N	N	96	18	96	140	90	N	N	N	N	N	N
97	1160499	N	N	N	-	-	N	N	N	N	N	N	Y	68	16	96	110	80	N	N	N	N	N	N
98	206046	N	N	N	-	-	N	N	N	N	N	N	Y	82	18	98	110	80	N	N	N	N	N	N
99	1319319	N	N	N	-	-	N	N	N	N	N	N	Y	82	18	96	120	90	N	N	N	N	N	N
100	5163	N	N	N	-	-	N	N	N	Y	N	N	N	90	16	96	110	80	N	N	N	N	N	N
101	1329573	TAB AMLONG 5MG OD	N	N	-	-	N	N	N	N	N	N	Y	74	18	98	120	90	N	N	N	N	N	N
102	1319187	N	N	N	-	-	N	N	N	N	N	N	Y	83	16	98	120	80	N	N	N	N	N	N
103	1325755	TAB ELTROXIN 75MCG OD	N	N	-	-	N	N	N	N	N	N	Y	82	18	96	110	80	N	N	N	N	N	N
104	849466	N	Y	N	120	6	N	N	N	N	N	N	Y	68	16	96	120	90	N	N	N	N	N	N
105	1328761	N	N	N	-	-	N	N	N	Y	N	N	N	82	18	96	110	80	N	N	N	N	N	N
106	1311985	N	N	N	-	-	N	N	N	Y	N	N	N	74	18	95	110	80	N	N	N	N	N	N
107	1323320	N	N	N	-	-	N	N	N	N	N	N	Y	76	16	98	110	90	N	N	N	N	N	N
108	1313135	N	N	N	-	-	N	N	N	N	N	N	Y	72	18	96	110	80	N	N	N	N	N	N
109	1327428	N	N	N	-	-	N	N	N	N	N	N	Y	82	18	98	110	80	N	N	N	N	N	N
110	1327509	N	Y	N	10	10	N	N	N	N	N	N	Y	78	14	96	120	90	N	N	N	N	N	N
111	1327381	N	N	N	-	-	N	N	N	N	N	N	Y	80	18	98	120	90	N	N	N	N	N	N
112	1327975	N	N	N	-	-	N	N	N	N	N	N	Y	68	16	98	120	90	N	N	N	N	N	N
113	1328154	TAB AMLONG 5MG OD	N	N	-	-	N	N	N	Y	N	N	N	68	20	98	110	90	N	N	N	N	N	N
114	1229536	TB METFORMIN-GP2 BD	N	N	-	-	N	N	N	Y	N	N	N	72	18	96	120	90	N	N	N	N	N	N
115	1328123	N	N	N	-	-	N	N	N	N	N	N	Y	74	16	98	110	80	N	N	N	N	N	N
116	1328080	N	N	N	-	-	N	N	N	N	N	N	Y	80	18	96	110	80	N	N	N	N	N	N
117	1229040	TAB ECOSPRIN AAV 75/20	N	N	-	-	N	N	N	Y	N	N	N	64	16	98	120	80	N	N	N	N	N	N
118	1332272	N	N	N	-	-	N	N	N	N	N	N	Y	82	18	96	120	90	N	N	N	N	N	N
119	1134568	TAB TELMA- AM BD CAP ECOSPRIN- AV 75/20 HS	N	N	-	-	N	N	N	N	N	N	Y	84	18	96	120	80	N	N	N	N	N	N
120	1330271	N	Y	N	125	5	N	N	N	N	N	N	Y	82	18	98	110	80	N	N	N	N	N	N
121	1317376	N	N	N	-	-	N	N	N	Y	N	N	N	86	18	96	120	90	N	N	N	N	N	N
122	1335982	N	N	N	-	-	N	N	N	N	N	N	Y	94	18	98	120	80	N	N	N	N	N	N
123	1335938	TAB AMLONG 5MG BD TAB ELTROXIN 75MCG OD	N	N	-	-	N	N	N	N	N	N	Y	82	18	96	120	80	N	N	N	N	N	N
124	1335962	N	N	N	-	-	N	N	N	N	N	N	Y	92	18	96	110	80	N	N	N	N	N	N
125	1338553	N	N	N	-	-	N	N	N	Y	N	N	N	74	16	98	120	90	N	N	N	N	N	N
126	1258966	TAB ELTROXIN 50MCG OD TAB TELMA 40MG OD	N	N	-	-	N	N	N	N	N	N	Y	76	18	98	110	80	N	N	N	N	N	N
127	899988	N	N	N	-	-	N	N	N	N	N	N	Y	74	16	96	120	90	N	N	N	N	N	N
128	1339813	TAB ELTROXIN 50MCG OD	N	N	-	-	N	N	N	N	N	N	Y	80	16	98	120	80	N	N	N	N	N	N
129	1279948	TAB TELMA 40MG OD TAB METFORMIN 500MG BD	N	N	-	-	N	N	N	N	N	N	Y	82	16	96	120	90	N	N	N	N	N	N
130	1338829	N	Y	N	125	50	N	N	N	N	N	N	Y	108	18	96	110	90	N	N	N	N	N	N
131	1338584	N	N	N	-	-	N	N	N	N	N	N	Y	64	16	98	120	80	N	N	N	N	N	N
132	1285617	N	N	N	-	-	N	N	N	N	N	N	Y	82	12	98	120	90	N	N	N	N	N	N
133	1337163	TAB TELMA-AM OD	N	N	-	-	N	N	N	N	N	N	Y	82	16	98	120	90	N	N	N	N	N	N
134	1339885	TAB TELMA 40MG BD	N	N	-	-	N	N	N	N	N	N	Y	80	16	96	110	80	N	N	N	N	N	N
135	1317574	TAB GLYCOMET GP2 BD TAB TELMA- AT OD	N	N	-	-	N	N	N	N	N	N	Y	86	16	96	120	90	N	N	N	N	N	N
136	1227045	N	N	N	-	-	N	N	N	N	N	N	Y	68	16	96	110	80	N	N	N	N	N	N
137	1340022	N	N	N	-	-	N	N	N	N	N	N	Y	74	18	98	110	80	N	N	N	N	N	N
138	1344452	TAB TELMA 40MG OD	N	N	-	-	N	N	N	Y	N	N	N	92	16	96	120	80	N	N	N	N	N	N
139	1343955	TAN ELTROXIN 50MCG OD	N	N	-	-	N	N	N	N	N	N	Y	86	18	98	110	80	N	N	N	N	N	N

Sr. No.	MRD. NO.	LYMPHADENOPATHY	BODY WEIGHT	HEIGHT	BMI	WAIST CIRCUMFERENCE	HIP CIRCUMFERENCE	MID- ARM CIRCUMFERENCE	SUBCUTANEOUS FAT STORES UNDER THE EYES	BICEPS	TRICEPS	MUSCLE WASTING TEMPLE	CLAVICLE	SHOULDER	QUADRICEPS	CALF	KNEE	CNS	CVSS1	CVS S2
68	1302374	N	78	1.55	32.46	96	98	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
69	1302454	N	60	1.61	23.14	106	108	28	GOOD	GOOD	GOOD	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
70	3754	N	62	1.5	27.55	96	98	30	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
71	1207480	N	80	1.77	25.53	76	80	22	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
72	1304237	N	115	1.77	36.707	104	106	26	GOOD	GOOD	GOOD	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
73	1309695	N	100	1.57	40.56	108	110	36	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
74	1310649	N	78	1.57	31.64	86	84	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
75	1163548	N	87	1.77	27.76	96	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
76	1311662	N	65	1.52	28.03	94	96	26	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
77	1301744	N	100	1.62	38.1	106	108	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
78	1312474	N	75	1.72	25.35	84	82	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
79	1310979	N	64	1.7	22.14	96	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
80	1317467	N	54	1.57	21.9	86	88	26	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
81	40939	N	69	1.72	23.32	98	96	28	GOOD	GOOD	GOOD	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
82	1228056	N	84	1.77	26.81	98	96	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
83	1317400	N	72	1.72	24.33	102	100	28	GOOD	GOOD	GOOD	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
84	1317299	N	70	1.7	24.22	96	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
85	1317436	N	75	1.57	30.42	106	108	30	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
86	144211	N	82	1.77	26.173	98	100	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
87	1322993	N	84	1.75	27.42	98	96	30	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
88	1323287	N	96	1.67	34.42	106	108	32	GOOD	GOOD	GOOD	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
89	1280738	N	68	1.67	24.38	84	86	22	POOR	POOR	POOR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
90	1323327	N	82	1.61	31.63	106	108	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
91	193918	N	70	1.52	30.297	98	100	28	GOOD	GOOD	GOOD	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
92	1323313	N	72	1.77	22.98	94	96	28	GOOD	GOOD	GOOD	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
93	1323011	N	76	1.72	25.68	98	100	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
94	1325935	N	60	1.65	22.038	96	98	28	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
95	1310439	N	54	1.676	19.36	86	84	22	POOR	POOR	POOR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
96	1183845	N	68	1.62	25.91	102	104	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
97	1160499	N	65	1.65	23.87	84	88	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
98	206046	N	68	1.7	23.529	96	98	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
99	1319319	N	60	1.62	22.86	98	100	28	GOOD	GOOD	GOOD	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
100	5163	N	72	1.54	30.359	98	100	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
101	1329573	N	75	1.52	32.46	96	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
102	1319187	N	60	1.626	22.69	84	86	26	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
103	1325755	N	99	1.57	40.163	106	108	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
104	849466	N	86	1.72	29.069	102	100	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
105	1328761	N	60	1.67	21.51	96	96	24	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
106	1311985	N	55	1.7	19.03	92	94	26	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
107	1323320	N	75	1.8034	23.148	94	98	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
108	1313135	N	65	1.67	23.306	94	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
109	1327428	N	67	1.57	27.181	98	102	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
110	1327509	N	74	1.75	24.163	96	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
111	1327381	N	91	1.82	24.453	96	98	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
112	1327975	N	57	1.626	21.559	86	88	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
113	1328154	N	56	1.62	21.338	96	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
114	1229536	N	55	1.549	22.92	86	88	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
115	1328123	N	65	1.67	23.3066	98	102	42	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
116	1328080	N	95	1.72	32.11	104	102	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
117	1229040	N	80	1.77	25.53	94	96	24	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
118	1332272	N	56	1.72	18.92	84	88	26	POOR	POOR	POOR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
119	1134568	N	67	1.7	23.18	98	102	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
120	1330271	N	60	1.72	20.28	92	94	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
121	1317376	N	85	1.7018	29.349	104	106	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
122	1335982	N	73	1.7526	23.76	96	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
123	1335938	N	65	1.524	28.133	106	108	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
124	1335962	N	42	1.62	16.003	84	86	24	POOR	POOR	POOR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
125	1338553	N	40	1.52	17.313	84	86	20	POOR	POOR	POOR	POOR	POOR	POOR	POOR	POOR	POOR	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
126	1258966	N	38	1.7	13.148	80	82	24	POOR	POOR	POOR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
127	899988	N	65	1.6	25.39	92	96	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
128	1339813	N	85	1.59	33.203	104	108	32	GOOD	GOOD	GOOD	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
129	1279948	N	80	1.828	23.94	98	102	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
130	1338829	N	92	1.879	26.057	98	98	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
131	1338584	N	64	1.8	19.75	84	86	24	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
132	1285617	N	72	1.77	22.98	96	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
133	1337163	N	40	1.57	16.227	82	84	20	POOR	POOR	POOR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
134	1339885	N	104	1.67	37.29	108	112	30	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
135	1317574	N	55	1.7	19.03	80	82	24	POOR	POOR	POOR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
136	1227045	N	65	1.54	27.407	94	98	32	GOOD	GOOD	GOOD	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
137	1340022	N	45	1.65	16.52	86	88	28	FAIR	FAIR	FAIR	POOR	POOR	POOR	POOR	POOR	POOR	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
138	1344452	N	65	1.62	24.76	92	96	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
139	1343955	N	65	1.6	25.39	94	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N

Sr. No.	MRD. NO.	CVS ANY ADDED SOUNDS	RESPIRATORY SYSTEM	INSPECTION SHAPE OF ABDOMEN	INSPECTION SKIN	INSPECTION ANY VENOUS PROMINENCE	INSPECTION VISIBLE PERISTALSIS	INSPECTION HERNIA SITES	SUPERFICIAL TEMP	SUPERFICIAL TENDERNESS	DEEP ANY LOCALISED LUMP	DEEP ORGANOMEGALY	DEEP LIVER SIZE	DEEP LIVER CONSISTENCY	DEEP LIVER MARGIN	DEEP LIVER TENDERNESS	PERCUSSION GENERAL NOTE OF ABDOMEN
68	1302374	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
69	1302454	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
70	3754	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
71	1207480	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
72	1304237	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
73	1309695	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
74	1310649	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
75	1163548	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
76	1311662	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
77	1301744	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
78	1312474	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
79	1310979	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
80	1317467	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
81	40939	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
82	1228056	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
83	1317400	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
84	1317299	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
85	1317436	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
86	144211	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
87	1322993	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
88	1323287	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
89	1280738	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
90	1323327	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
91	193918	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
92	1323313	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
93	1323011	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
94	1325935	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
95	1310439	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
96	1183845	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
97	1160499	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
98	206046	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
99	1319319	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
100	5163	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
101	1329573	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
102	1319187	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
103	1325755	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
104	849466	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
105	1328761	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
106	1311985	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
107	1323320	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
108	1313135	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
109	1327428	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
110	1327509	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
111	1327381	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
112	1327975	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
113	1328154	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
114	1229536	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
115	1328123	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
116	1328080	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
117	1229040	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
118	1332272	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
119	1134568	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
120	1330271	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
121	1317376	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
122	1335982	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
123	1335938	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
124	1335962	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
125	1338553	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
126	1258966	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
127	899988	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
128	1339813	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
129	1279948	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
130	1338829	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
131	1338584	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
132	1285617	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
133	1337163	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
134	1339885	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
135	1317574	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
136	1227045	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
137	1340022	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
138	1344452	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
139	1343955	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL

Sr. No.	MRD. NO.	PERCUSSION UPPER BORDER OF LIVER	PERCUSSION SHIFTING DULLNESS	AUSCULTATION BOWEL SOUNDS	AUSCULTATION VENOUS HUM/ BRUIT	BILIRUBIN (TOTAL)	BILIRUBIN (DIRECT)	AST	ALT	ALP	TOTAL PROTEINS	ALBUMIN	INR	TRIGLYCERIDES	CHOLESTEROL	HDL CHOLESTEROL	LDL CHOLESTEROL	TLC	NEUTROPHILS	LYMPHOCYTES	MONOCYTES	EOSINOPHILS	BASOPHILS	HB	MCV
68	1302374	5TH SPACE	N	NORMAL	N	0.21	0.08	12	49	123	5.3	2.47	1.3	109	126	50	52	9.2	77.9	11.5	10.2	0.2	0.2	9.8	86.6
69	1302454	6TH SPACE	N	NORMAL	N	1.09	0.2	19	28	73	6.8	3.8	1.3	86	162	43	100	15.4	83	5.5	9.9	1	0.2	11.6	81.3
70	3754	6TH SPACE	N	NORMAL	N	0.83	0.19	23	37	67	7	4.03	1.25	150	240	60	140	9	79.9	10.6	8.8	0.5	0.2	11.1	85
71	1207480	5TH SPACE	N	NORMAL	N	0.19	0.05	22	36	75	7.8	4.22	0.95	148	242	62	138	6.8	36.7	48.6	9.3	4.5	0.9	12.9	84.3
72	1304237	5TH SPACE	N	NORMAL	N	0.45	0.06	25	38	51	6.8	3.91	1.02	170	277	64	176	10.6	61.5	27.8	9.8	0.4	0.5	11.4	83.9
73	1309695	6TH SPACE	N	NORMAL	N	1	0.19	38	62	188	9.2	5.24	1.14	84	154	40	96	10.7	86.1	3.9	9.5	0.3	0.2	14.9	86.6
74	1310649	6TH SPACE	N	NORMAL	N	1.71	0.65	33	55	84	7.7	4.06	1.42	184	176	68	92	12.49	88.7	5.2	6	0.1	0	10.6	90.4
75	1163548	5TH SPACE	N	NORMAL	N	0.09	0.07	15	41	76	7.5	4.25	1.3	142	190	68	128	10.9	79.7	10.8	8.9	0.4	0.2	13.6	106
76	1311662	6TH SPACE	N	NORMAL	N	1.36	0.22	22	43	124	7.3	4.41	1.43	192	232	56	132	9.23	82.8	13.8	3.1	0.1	0.2	11.2	87.6
77	1301744	6TH SPACE	N	NORMAL	N	0.41	0.2	15	29	68	7	4.36	1.18	150	196	42	96	18.7	84.2	7.7	7.8	0.1	0.2	9.8	67.3
78	1312474	5TH SPACE	N	NORMAL	N	0.95	0.68	25	47	80	6.3	3.75	1.02	182	108	62	86	9.9	40.7	48.1	10.3	0.2	0.7	14.2	96.3
79	1310979	6TH SPACE	N	NORMAL	N	1	0.6	12	28	84	8.2	4.6	1.28	238	284	54	186	7.6	48.2	44.5	7.3	0	0	12.6	96
80	1317467	5TH SPACE	N	NORMAL	N	0.83	0.6	16	37	106	5.8	3.46	1.26	142	186	54	128	7.1	95.6	3	1.2	0.1	0.1	12.1	92
81	40939	6TH SPACE	N	NORMAL	N	1.33	0.6	16	35	98	5.8	3.48	1.11	138	176	58	126	7.1	95.6	3	1.2	0.1	0.1	12.1	92
82	1228056	5TH SPACE	N	NORMAL	N	0.34	0.15	14	29	64	6.9	3.46	1.3	132	174	56	124	14.9	78.1	11	8.2	2.5	0.2	9.9	87.2
83	1317400	5TH SPACE	N	NORMAL	N	0.63	0.2	26	41	103	6.5	3.58	1.24	131	172	56	120	15.4	86.3	5.8	7.6	0.2	0.1	11.5	88.4
84	1317299	6TH SPACE	N	NORMAL	N	1.18	0.33	22	36	72	8.1	4	1.24	128	176	68	120	6.87	70.5	28	1.1	0	0.4	14.6	93.6
85	1317436	5TH SPACE	N	NORMAL	N	1.02	0.86	19	39	118	8.1	4.559	1.39	130	173	56	124	11	83.7	10.4	4.3	1.1	0.5	10.1	77.8
86	144211	5TH SPACE	N	NORMAL	N	0.97	0.45	22	38	124	6.5	4.15	1.4	134	172	62	128	11.8	78	13.9	7.3	0.5	0.5	9.1	83.8
87	1322993	6TH SPACE	N	NORMAL	N	0.96	0.48	28	37	117	7.2	4.36	1.01	136	174	64	126	7.82	61	25.2	9.5	3.8	0.5	10.7	80.8
88	1323287	6TH SPACE	N	NORMAL	N	0.11	0.05	10	26	67	6.4	3.86	0.99	132	176	64	128	7.95	64.1	24.6	9.1	1.8	0.4	9.3	71.9
89	1280738	5TH SPACE	N	NORMAL	N	0.22	0.1	15	27	94	5.9	3.31	1.69	122	168	62	126	13.38	93.7	1.6	4.5	0.1	0.1	8.7	92.6
90	1323327	5TH SPACE	N	NORMAL	N	0.65	0.11	19	33	34	7.6	4	1.24	134	176	68	124	6	68.6	19.7	10.8	0.5	0.4	11.7	76.3
91	193918	6TH SPACE	N	NORMAL	N	0.44	0.14	17	28	80	8	4.46	1	130	174	68	124	6.71	62.6	31.6	5.3	0.3	0.2	10.4	78.5
92	1323313	5TH SPACE	N	NORMAL	N	0.92	0.28	18	38	56	7.7	4.19	1.2	32	172	68	124	15.39	84.3	10.9	4.6	0.2	0	13.7	93.2
93	1323011	6TH SPACE	N	NORMAL	N	0.47	0.21	21	36	168	6.4	3.98	0.97	136	178	68	126	17.9	88.6	5.7	5.5	0.1	0.1	10.6	84.1
94	1325935	6TH SPACE	N	NORMAL	N	0.37	0.15	15	28	101	6.7	4.06	0.98	136	178	66	126	15.9	79.8	11	9.2	0	0	11.2	67.6
95	1310439	6TH SPACE	N	NORMAL	N	1.2	0.8	2	25	96	6.4	4.5	1.38	142	178	62	124	6.1	63	19.8	9	7.3	0.9	10.7	84.7
96	1183845	5TH SPACE	N	NORMAL	N	0.25	0.04	19	39	145	6.4	3.12	1.46	138	176	68	128	6.6	57	27.1	8.9	6.3	0.7	9.5	68.3
97	1160499	6TH SPACE	N	NORMAL	N	1.04	0.58	21	37	149	5.6	3.1	1.26	130	172	64	123	4.8	74.9	24.9	0.1	0.1	0	12.1	104
98	206046	5TH SPACE	N	NORMAL	N	1.11	0.46	19	34	123	7.2	4.3	1.01	134	174	68	124	7.7	73.8	13.2	9.4	2.9	0.7	13.6	104
99	1319319	6TH SPACE	N	NORMAL	N	0.33	0.13	8	16	89	5.2	2.9	1.13	132	176	66	124	3.2	72.1	15.3	9.7	2.4	0.5	14.6	96.2
100	5163	5TH SPACE	N	NORMAL	N	0.95	0.45	16	28	108	6.5	3.5	1.1	138	176	72	126	14.7	89.6	6.9	3	0.4	0.1	11.9	87.5
101	1329573	6TH SPACE	N	NORMAL	N	0.27	0.13	12	26	62	5.5	3.4	0.89	138	172	64	128	11	75.3	13.6	10.3	0.6	0.2	10.3	94.3
102	1319187	6TH SPACE	N	NORMAL	N	0.23	0.08	10	27	74	6	2.67	1.27	124	172	64	122	8.84	91.2	5.2	3.5	0.1	0	12.5	71.9
103	1325755	5TH SPACE	N	NORMAL	N	0.76	0.4	24	41	188	4.2	3.19	1.24	134	172	78	122	7.42	83.7	12.5	3.6	0.2	0	9.8	72.8
104	849466	6TH SPACE	N	NORMAL	N	1.02	0.74	14	34	118	5.9	2.96	1.37	138	176	72	128	6.4	69.9	17	8.8	3.5	0.8	10.1	99.8
105	1328761	5TH SPACE	N	NORMAL	N	0.45	0.16	15	30	167	5.7	3.21	1.36	138	176	62	126	10.4	80	12	7	1	0	9.6	94.6
106	1311985	5TH SPACE	N	NORMAL	N	0.24	0.08	13	25	66	6.9	3.85	1.04	136	174	66	124	7.73	53	34.6	4.3	7.8	0.3	11.8	81.6
107	1323320	6TH SPACE	N	NORMAL	N	0.43	0.19	21	36	65	6.7	3.88	1.26	136	174	68	128	12	89.7	2.9	7.2	0.1	0.1	13.6	89.7
108	1313135	5TH SPACE	N	NORMAL	N	0.35	0.1	15	31	120	6.9	3.83	1.29	136	172	62	126	8.5	62	25.7	7.9	4.2	0.2	12.7	85.7
109	1327428	5TH SPACE	N	NORMAL	N	0.43	0.09	21	37	122	5.1	3.13	1.36	136	178	64	124	15.8	90.4	3.4	5.7	0	0.5	9.6	85.9
110	1327509	6TH SPACE	N	NORMAL	N	0.82	0.46	19	36	65	4.6	2.51	1.48	132	174	76	132	6.8	81.7	12.5	5	0.3	0.5	10.6	96
111	1327381	5TH SPACE	N	NORMAL	N	1.67	1.37	13	24	127	7.1	5.6	1.38	134	172	76	124	14.13	94	1.9	2.1	0	0	9.4	85.4
112	1327975	6TH SPACE	N	NORMAL	N	0.22	0.09	19	42	101	6.5	4.17	0.98	136	178	68	128	12.62	62.6	28.4	6.4	2.3	0.3	13.8	95.5
113	1328154	5TH SPACE	N	NORMAL	N	0.68	0.45	18	35	88	6.6	3.81	1.13	129	157	20	89	15.8	83.4	8.7	6.5	1.3	0.1	12.5	89.9
114	1229536	6TH SPACE	N	NORMAL	N	0.44	0.1	14	35	84	5.6	3.32	1.36	78	158	46	88	6.82	69.7	17.3	10.2	2.5	0.3	10.4	86.6
115	1328123	5TH SPACE	N	NORMAL	N	0.55	0.25	16	44	57	5.7	3.11	1.28	128	198	54	120	4.97	76.4	9.6	10.8	3.1	0.1	11	89
116	1328080	5TH SPACE	N	NORMAL	N	0.54	0.32	15	32	112	6.2	2.85	1.26	136	178	76	128	10.54	89.7	4.5	3.7	0.1	0	12.5	89
117	1229040	6TH SPACE	N	NORMAL	N	0.34	0.15	18	33	64	6.9	3.46	1.3	132	174	78	128	14.9	78.1	11	8.2	2.5	0.2	9.9	87.2
118	1332272	5TH SPACE	N	NORMAL	N	0.7	0.5	14	35	198	6.7	2.85	1.35	138	176	72	126	4.8	78.3	10.6	10.6	0.2	0.3	9.8	42.6
119	1134568	6TH SPACE	N	NORMAL	N	0.34	0.11	12	25	111	6.5	3.56	1	138	176	68	126	10	52.8	36	9.8	1.2	0.2	12.2	96.1
120	1330271	5TH SPACE	N	NORMAL	N	0.78	0.65	16	36	84	5.5	2.79	1.38	134	172	72	122	15.18	83.2	5.1	10.3	1.4	0	10	89.8
121	1317376	5TH SPACE	N	NORMAL	N	0.55	0.16	18	33	85	7.6	4.45	1.03	132	182	64	132	8.6	51.7	37.2	6.5	3.8	0.8	12.9	73.6
122	1335982	6TH SPACE	N	NORMAL	N	0.47	0.12	10	24	84	6.8	3.77	1.16	132	178	62	132	6	90.8	3.1	6	0	0.1	9.8	87.1
123	1335938	5TH SPACE	N	NORMAL	N	0.83	0.56	18	40	97	5.8	3	1.18	132	172	64	122	14.57	89.7	3.5	6.6	0.2	0	10.9	95.8
124	1335962	5TH SPACE	N	NORMAL	N	1.24	0.84	7	33	93	6.2	3.82	1.25	138	176	62	124	10.7	72	18	10	0	0	12.3	87
125	1338553	5TH SPACE	N	NORMAL	N	0.38	0.07	12	30	77	6.3	3.4	1.12	138	172	54	134	11.6	91.1	5.9	2.8	0.1	0.1	11.1	90.1
126	1258966	5TH SPACE	N	NORMAL	N	0.7	0.13	13	30	56	7.8	4.41	1.21	136	172	64	126	8.49	86.4	9.8	3.7	0	0.1	15.3	91.8
127	899988	6TH SPACE	N	NORMAL	N	0.48	0.33	13	22	153	6	2.87	1.5	138	176	74	126	11.4	77	11.4	10.5	0.4	0.7	10	78.3
128	1339813	5TH SPACE	N	NORMAL	N	0.17	0.08	24	36	128	6.9	4.03	1.03	130	178	72	136	8.93	72.4	17.5	10	0.1	0	12.6	84.6
129	1279948	6TH SPACE	N	NORMAL	N	0.85	0.12	18	32	53	7.9	4.41	1.02	148	172	58	128	13.1	82.6	1.1	10.3	0	0	12	87.3
130	1338829	5TH SPACE	N	NORMAL	N	0.46	0.13	5	16	68	7.8	3.71	1.17	132	178	66	128	9.36	87.6	9.7	2.4	0.2	0.1	11.6	88.7
131	1338584	5TH SPACE	N	NORMAL	N	0.41	0.15	12	30	61	6.4	3.58	1.26	134	180	70	132	5.8	82	15.3	2.5	0	0.2	12.9	83.9
132	1285617	6TH SPACE	N	NORMAL	N	0.51	0.14	11	27	78	6.5	3.91	1.26	138	168	58	128	6.8	75.2	18.7	5.3	0.6	0.2	13.9	83.5
133	1337163	5TH SPACE	N	NORMAL	N	0.37	0.05	10	49	52	6.7	3.8	0.98	135	176	64	128	8.6	82.5	13.8	3.3	0	0.4	10	87
134	1339885	5TH SPACE	N	NORMAL	N	0.46	0.27	19	34	58	6.7	3.94	1.28	134	178	68	128	13.77	76.7	12.8	7	3.1	0.4	9.7	83.6
135	1317574	5TH SPACE	N	NORMAL	N	0.68	0.13	12	31	68	8	3.84	1.22	142	178	68	132	13.6	49.9	38.2	8.2	2.9	0.8	10.3	87.8
136	1227045	6TH SPACE	N	NORMAL	N	0.47	0.27	3	7	89	6.8	2.53	1.19	134	180	66	130	12.5	76.5	13	10	0.4	0.1	9.3	89.3
137	1340022	5TH SPACE	N	NORMAL	N	0.56	0.18	7	22	159	6.7	3.78	1.16	142	182	48	128	6.17	59	35.2	4.2	1.2	0.4	8.9	81.2
138	1344452	6TH SPACE	N	NORMAL	N	0.11	0.03	13	27	57	7.2	3.3	1.48	146	172	78	128	10.65	86.2	5.7	7.1	1	0	9.2	76.7
139	1343955	5TH SPACE	N	NORMAL	N	0.56	0.26	9	24	74	5	2.54	1.35	72	154	44	138	8.02	63.3	25.5	10.1	0.8	0.3	11.1	91.7

Sr. No.	MRD. NO.	PLATELET COUNT	UREA	CREATININE	NA+	K+	CL-	FBS	RBS	HB1Ac	HBsAg	ANTI-HCV	ANTI-HIV	ANY OTHER INVESTIGATION	HEPATIC STEATOSIS INDEX (HSI)	APRI	FIB-4 SCORE	BARD SCORE	NAFLD SCORE	GRADE OF FATTY LIVER	ANY OTHER SPECIFIC POINT	FIBROSCAN	SARC-F SCORING SYSTEM STRENGTH	SARC-F SCORING SYSTEM ASSISSTANCE IN WALKING	RISE FROM A CHAIR
68	1302374	204	11	0.83	137	3.89	95	90	96	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	65.1	0.1	0.31	1	-1.29	1	-	-	0	0	0
69	1302454	150	25	0.96	138	4.26	104	99	106	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	36.9	0.3	0.84	0	-1.99	1	-	-	0	0	0
70	3754	190	33	0.89	137	3.89	104	90	96	5.9	NEGATIVE	NEGATIVE	NEGATIVE	-	40.4	0.3	1.01	0	-1.71	2	-	-	1	1	0
71	1207480	283	28	1.28	140	4.92	109	96	102	4.2	NEGATIVE	NEGATIVE	NEGATIVE	-	38.6	0.2	0.61	0	-3.4	1	-	-	1	0	0
72	1304237	189	52	1.12	141	4.63	103	106	108	6.2	NEGATIVE	NEGATIVE	NEGATIVE	-	50.9	0.3	1.33	1	-0.32	3	-	-	1	0	0
73	1309695	178	36	1.4	141	3.92	109	96	102	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	53.6	0.5	1.19	1	-1.4	1	-	-	1	1	1
74	1310649	100	84	4.51	140	4.75	106	102	116	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	45	0.4	1.41	1	-1.04	2	-	-	0	0	0
75	1163548	208	21	1.24	132	5.1	96	78	84	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	49.6	0.2	0.54	0	-2.44	1	-	-	0	0	0
76	1311662	227	27	0.64	139	3.58	101	98	102	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	46	0.2	0.84	1	-2.29	2	-	-	0	0	0
77	1301744	202	26	0.7	132	4.6	93	102	104	5.9	NEGATIVE	NEGATIVE	NEGATIVE	-	53.6	0.2	0.92	1	-0.54	1	-	-	1	0	1
78	1312474	194	123	4.23	142	3.9	104	76	82	4.4	NEGATIVE	NEGATIVE	NEGATIVE	-	40.4	0.3	0.53	0	-2.73	1	-	-	0	0	0
79	1310979	220	72	1.4	136	4.2	108	96	98	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	40.8	0.1	0.63	0	-2.81	2	-	-	1	0	0
80	1317467	190	46	1.18	140	3.85	104	82	89	5.4	NEGATIVE	NEGATIVE	NEGATIVE	-	40.4	0.2	1.01	0	-1.24	2	-	-	0	0	0
81	40939	230	46	1.18	140	3.75	104	96	98	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	40.7	0.2	0.92	0	-1.43	2	-	-	0	0	0
82	1228056	427	19	0.64	128	5.25	90	106	109	6.2	NEGATIVE	NEGATIVE	NEGATIVE	-	43.4	0.1	0.5	0	-1.81	1	-	-	1	0	1
83	1317400	243	31	1.05	129	4.8	89	101	103	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	36.9	0.3	1.2	0	-1.62	1	-	-	1	0	0
84	1317299	250	26	1.12	136	4.52	100	101	106	4.9	NEGATIVE	NEGATIVE	NEGATIVE	-	37.3	0.2	0.81	0	-2.65	1	-	-	0	0	0
85	1317436	190	60	0.9	136	5.2	101	101	105	4.7	NEGATIVE	NEGATIVE	NEGATIVE	-	48.8	0.3	0.78	1	-2.02	2	-	-	0	0	0
86	144211	179	35	1.67	134	4.8	72	89	96	4.4	NEGATIVE	NEGATIVE	NEGATIVE	-	40	0.3	1.79	0	-0.56	2	-	-	1	0	0
87	1322993	200	12	0.91	138	4.26	102	98	100	6.1	NEGATIVE	NEGATIVE	NEGATIVE	-	38	0.3	1.15	0	-1.98	1	-	-	1	0	0
88	1323287	349	73	1.12	134	5.08	113	98	100	5.2	NEGATIVE	NEGATIVE	NEGATIVE	-	57.2	0.1	0.4	1	-2.52	1	-	-	1	0	1
89	1280738	262	6	1.65	137	4.94	115	110	118	4.9	NEGATIVE	NEGATIVE	NEGATIVE	-	38.8	0.1	0.8	0	-1.72	1	-	-	1	0	0
90	1323327	225	40	0.87	139	4.05	102	96	100	6.2	NEGATIVE	NEGATIVE	NEGATIVE	-	47.5	0.2	0.66	1	-2.03	2	-	-	0	0	1
91	193918	381	26	0.68	141	3.69	108	98	100	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	45.5	0.1	0.3	1	-4.79	2	-	-	0	0	0
92	1323313	206	40	0.66	137	3.26	101	82	86	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	39.9	0.2	0.92	0	-2.08	2	-	-	0	0	0
93	1323011	418	36	1.05	136	3.42	64	96	100	6	NEGATIVE	NEGATIVE	NEGATIVE	-	43.4	0.1	0.6	1	-4.07	1	-	-	1	0	0
94	1325935	195	45	1.11	144	5.13	108	106	108	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	37	0.2	0.87	0	-2.07	1	-	-	0	0	0
95	1310439	180	20	1.2	138	4.6	98	102	108	6.1	NEGATIVE	NEGATIVE	NEGATIVE	-	44.4	0.1	0.2	0	-4	2	-	-	0	0	0
96	1183845	240	52	1.31	136	5.04	102	106	112	6.2	NEGATIVE	NEGATIVE	NEGATIVE	-	44.3	0.2	0.82	0	-1.53	2	-	-	1	0	0
97	1160499	220	22	1.08	133	4.13	98	76	94	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	40	0.2	0.39	0	-2.85	1	-	-	0	0	0
98	206046	202	25	0.89	137	4.8	98	89	97	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	37.8	0.2	0.85	0	-2.41	1	-	-	0	0	0
99	1319319	184	62	1.42	136	4.71	115	96	98	4.7	POSITIVE	NEGATIVE	NEGATIVE	-	38.9	0.1	0.71	0	-0.93	1	-	-	1	0	0
100	5163	220	84	1.26	128	4.6	100	86	90	5.7	NEGATIVE	NEGATIVE	NEGATIVE	-	46.4	0.2	0.43	1	-2.01	1	-	-	0	0	0
101	1329573	180	45	0.99	136	4.8	95	102	108	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	51.8	0.2	1.05	1	0.21	1	-	-	1	0	0
102	1319187	350	48	1.48	141	3.8	107	104	108	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	44.3	0.1	0.38	0	-2.9	1	-	-	1	0	0
103	1325755	201	54	0.85	134	4.57	105	96	98	4.5	NEGATIVE	NEGATIVE	NEGATIVE	-	55.8	0.3	1.14	1	0.22	2	-	-	1	0	0
104	849466	252	19	0.89	138	4.15	103	110	116	6	NEGATIVE	NEGATIVE	NEGATIVE	-	48.5	0.1	0.45	1	-2.03	3	-	-	0	0	0
105	1328761	464	30	1.44	132	4.8	93	102	100	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	37.5	0.1	0.61	0	-5.01	1	-	-	0	0	0
106	1311985	405	18	0.66	138	4.64	97	82	84	3.8	NEGATIVE	NEGATIVE	NEGATIVE	-	36.4	0.1	0.22	0	-5.92	1	-	-	0	0	0
107	1323320	226	65	0.75	144	4.53	101	98	102	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	36.9	0.2	1.15	0	-1.68	1	-	-	0	0	0
108	1313135	306	43	1.11	136	4.46	102	94	96	5.7	NEGATIVE	NEGATIVE	NEGATIVE	-	39.8	0.1	0.48	0	-3.48	2	-	-	0	0	0
109	1327428	295	53	1.54	130	4.65	105	106	108	5.9	NEGATIVE	NEGATIVE	NEGATIVE	-	43.3	0.2	0.64	0	-2.42	2	-	-	1	0	0
110	1327509	260	26	1.26	138	4.6	108	108	112	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	39.3	0.2	0.41	0	-2.66	2	-	-	0	0	0
111	1327381	280	58	1.74	138	4.8	110	104	108	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	39.8	0.1	0.3	0	-4.99	2	-	-	1	0	0
112	1327975	224	21	0.71	139	3.96	99	96	100	5.4	NEGATIVE	NEGATIVE	NEGATIVE	-	39.2	0.2	0.24	0	-4.2	1	-	-	0	0	0
113	1328154	202	42	1.18	136	4.63	101	96	100	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	36.9	0.2	0.95	0	-1.95	3	-	-	1	0	1
114	1229536	396	50	1.38	134	3.79	86	112	115	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	44.9	0.1	0.5	1	-3.39	1	-	-	1	0	1
115	1328123	248	58	1.48	136	4.8	102	102	106	4.7	NEGATIVE	NEGATIVE	NEGATIVE	-	45.3	0.2	0.58	0	-2.18	1	-	-	0	0	0
116	1328080	190	56	0.99	135	3.62	93	104	108	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	50.2	0.2	0.89	1	-0.18	1	-	-	0	0	1
117	1229040	427	19	0.61	134	5.2	90	108	112	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	40.2	0.1	0.6	0	-3.54	1	-	-	1	0	1
118	1332272	242	25	0.71	132	4.87	97	82	88	4.9	NEGATIVE	NEGATIVE	NEGATIVE	-	38.9	0.1	0.73	0	-1.75	2	-	-	1	0	0
119	1134568	224	25	1.84	137	4.38	102	104	108	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	39.8	0.1	0.84	0	-1.4	3	-	-	1	0	1
120	1330271	220	92	1.1	141	4.3	104	102	104	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	38.3	0.2	0.39	0	-2.85	1	-	-	0	0	0
121	1317376	219	16	0.67	134	4.16	91	96	98	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	44	0.2	0.73	1	-2.27	2	-	-	1	0	0
122	1335982	265	80	1.98	125	3.9	99	201	208	7.8	NEGATIVE	NEGATIVE	NEGATIVE	-	45	0.1	0.35	1	-2.77	3	-	-	0	0	0
123	1335938	212	22	0.53	143	3.58	107	71	79	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	47.9	0.2	0.85	1	-0.99	2	-	-	1	0	1
124	1335962	238	10	0.61	139	4.39	103	92	96	5.9	NEGATIVE	NEGATIVE	NEGATIVE	-	55.7	0.1	0.15	0	-4.32	2	-	-	0	0	0
125	1338553	271	16	0.67	143	3.16	113	90	96	4.2	NEGATIVE	NEGATIVE	NEGATIVE	-	37.3	0.1	0.32	0	-1.89	2	-	-	1	0	0
126	1258966	249	46	1.6	138	5.05	95	108	118	4.4	NEGATIVE	NEGATIVE	NEGATIVE	-	38.5	0.1	0.63	0	-3.3	1	-	-	1	0	0
127	899988	391	20	1.2	138	4.78	108	108	112	6.1	NEGATIVE	NEGATIVE	NEGATIVE	-	38.9	0.1	0.29	0	-4.2	1	-	-	0	0	0
128	1339813	316	26	0.77	136	4.27	103	100	106	3.6	NEGATIVE	NEGATIVE	NEGATIVE	-	47.2	0.2	0.61	0	-2.89	1	-	-	1	0	1
129	1279948	260	40	1.53	136	5.12	103	90	94	5.3	NEGATIVE	NEGATIVE	NEGATIVE	-	40.2	0.2	0.86	1	-2.57	1	-	-	1	0	1
130	1338829	241	38	1.39	136	4.37	104	82	96	5.3	NEGATIVE	NEGATIVE	NEGATIVE	-	51.7	0.1	0.44	0	-1.33	2	-	-	1	1	1
131	1338584	192	14	0.87	133	4.46	99	92	96	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	39.8	0.2	0.24	0	-3.53	1	-	-	0	0	0
132	1285617	306	18	0.55	142	4.65	103	98	96	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	42.6	0.1	0.15	0	-4.89	1	-	-	0	0	0
133	1337163	434	60	1.56	141	3.64	102	100	116	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	57.4	0.1	0.26	0	-5.13	1	-	-	2	1	1
134	1339885	187	60	1.13	126	4.5	102	108	114	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	51.6	0.3	0.82	1	-0.91	2	-	-	0	0	0
135	1317574	150	47	1.01	133	4.45	98	196	214	7.8	NEGATIVE	NEGATIVE	NEGATIVE	-	43.7	0.2	1.22	1	0.28	1	-	-	1	0	0
136	1227045	267	32	2.72	137	3.45	98	110	114	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	48.1	0	0.23	0	-1.82	3	-	-	0	0	0
137	1340022	210	9	0.59	136	4.04	99	89	96	5.7	NEGATIVE	NEGATIVE	NEGATIVE	-	43.7	0.1	0.28	0	-3.55	3	-	-	1	0	0
138	1344452	250	14	0.78	133	4.8	101	98	102	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	43.4	0.1	0.56	0	-2.23	1	-	-	1	0	0
139	1343955	318	41	1.39	148	3.8	103	91	98	4.2	NEGATIVE	NEGATIVE	NEGATIVE	-	46.7	0.1	0.38	0	-2.32	2	-	-	1	0	0

Sr. No.	MRD. NO.	CLIMB STAIRS	FALLS	SARC-F TOTAL SCORE	APPENDICULAR SKELETAL MUSCLE MASS (ASM)	SKELETAL MUSCLE INDEX (SMI)	HAND GRIP STRENGTH1	HAND GRIP STRENGTH2	HAND GRIP STRENGTH3	HAND GRIP STRENGTH LEFT HAND1	HAND GRIP STRENGTH LEFT HAND2	HAND GRIP STRENGTH LEFT HAND3	HAND GRIP STRENGTH MAXIMUM READING	SHORT PHYSICAL PERFORMANCE BATTERY (SPPB) SCORE	BALANCE TEST FEET TOGETHER	BALANCE TEST SEMI TANDEM POSITION	BALANCE TEST TANDEM POSITION	8 FEET WALK TEST	TOTAL SPPB TEST SCORE
68	1302374	0	0	0	29.194	0.894	32	30	32	28	30	28	32	3	1	1	2	3	10
69	1302454	0	0	0	25.72	1.111	24	26	22	20	16	18	26	2	1	1	2	2	8
70	3754	0	0	2	24.428	0.8866	20	22	18	20	18	16	22	4	1	1	2	4	12
71	1207480	0	0	1	30.42	1.191	30	28	30	30	30	32	32	3	1	1	2	3	10
72	1304237	0	0	1	30.89	0.8415	26	26	28	26	28	22	28	2	1	1	1	2	7
73	1309695	0	0	3	34.034	0.8391	40	40	38	38	34	34	40	2	1	1	2	3	9
74	1310649	0	0	0	27.116	0.85	32	28	28	30	26	30	32	4	1	1	2	4	12
75	1163548	0	0	0	32.034	1.1539	28	26	28	30	28	28	30	3	1	1	2	3	10
76	1311662	0	0	0	17.23	0.614	28	26	28	30	28	28	30	4	1	1	2	4	12
77	1301744	1	0	3	32.17	0.844	20	18	18	18	16	12	20	2	1	1	2	2	8
78	1312474	0	0	0	30.67	1.2048	26	28	28	28	26	22	28	4	1	1	2	4	12
79	1310979	0	0	1	24.6	1.11	22	18	20	18	20	18	22	2	1	1	2	2	8
80	1317467	0	0	0	19.96	0.911	28	26	28	24	24	24	28	3	1	1	2	4	11
81	40939	0	0	0	24.306	1.042	18	20	18	20	16	16	20	4	1	1	2	4	12
82	1228056	1	0	3	27.96	1.042	28	28	26	24	22	22	28	3	1	1	1	3	9
83	1317400	0	0	1	25.62	1.05	26	26	24	22	20	20	26	3	1	1	1	3	9
84	1317299	0	0	0	26.95	1.12	36	34	34	28	30	32	36	3	1	1	2	4	11
85	1317436	0	0	0	18.846	0.619	16	18	18	14	14	12	18	3	1	1	1	3	9
86	144211	0	0	1	27.088	1.03	26	26	22	24	22	24	26	2	1	1	2	2	8
87	1322993	0	0	1	30.946	1.12	18	20	20	20	18	18	20	2	1	1	2	3	9
88	1323287	1	0	3	24.593	0.71	14	14	12	12	8	8	14	2	1	1	2	3	9
89	1280738	0	0	1	24.164	0.991	24	26	22	22	22	18	26	3	1	1	1	3	9
90	1323327	0	0	1	23.248	0.73	22	24	16	18	16	18	24	2	1	1	2	1	7
91	193918	0	0	0	20.508	0.67	16	18	14	14	12	14	18	2	1	1	1	2	7
92	1323313	0	0	0	26.696	1.161	24	26	26	22	20	20	26	3	1	1	2	3	10
93	1323011	1	0	2	20	0.77	24	26	22	22	24	22	26	3	1	1	2	2	9
94	1325935	0	0	0	23.33	1.058	36	38	34	30	30	26	38	4	1	1	2	4	12
95	1310439	0	0	0	25.69	1.32	26	28	26	24	24	26	28	3	1	1	2	2	9
96	1183845	1	0	2	17.958	0.693	20	22	20	18	18	16	22	2	1	1	1	2	7
97	1160499	0	0	0	21.38	0.89	20	22	24	16	14	18	24	4	1	1	2	4	12
98	206046	0	0	0	26.358	1.12	32	30	32	28	28	26	32	3	1	1	2	4	11
99	1319319	0	0	1	22.606	0.988	26	26	22	20	24	20	26	3	1	1	2	4	11
100	5163	0	0	0	21.648	0.71	28	30	28	30	26	22	30	4	1	1	2	3	11
101	1329573	1	0	2	17.416	0.536	20	24	20	22	18	18	24	2	1	1	2	2	8
102	1319187	0	0	1	22.162	0.97	28	26	28	24	24	24	28	2	1	1	2	2	8
103	1325755	0	0	1	25.524	0.6355	16	18	18	14	12	14	18	1	1	1	1	2	6
104	849466	0	0	0	31.494	1.083	38	36	30	32	34	32	38	3	1	1	2	4	11
105	1328761	0	0	0	23.29	1.069	32	36	34	28	32	30	36	3	1	1	2	4	11
106	1311985	0	0	0	18.448	0.96	26	28	24	22	20	24	28	3	1	1	2	3	10
107	1323320	0	0	0	26.808	1.15811	26	24	26	22	20	20	26	3	1	1	2	2	9
108	1313135	0	0	0	25.196	1.08	36	34	36	30	28	22	36	2	1	1	2	2	8
109	1327428	0	0	1	18.296	0.6731	18	16	20	14	16	14	20	2	1	1	2	1	7
110	1327509	0	0	0	30.076	1.244	26	28	24	24	24	22	28	3	1	1	2	3	10
111	1327381	0	0	1	32.524	1.33	30	32	26	26	24	28	32	2	1	1	2	2	8
112	1327975	0	0	0	26.524	1.23	38	40	44	36	32	38	44	3	1	1	2	4	11
113	1328154	0	0	2	21.826	1.022	24	26	20	20	22	18	26	1	1	1	2	2	7
114	1229536	1	0	3	12.468	0.5439	16	18	14	14	10	12	18	2	1	1	2	1	7
115	1328123	0	0	0	24.706	1.06	30	28	32	26	24	22	32	2	1	1	2	2	8
116	1328080	0	0	1	32.024	0.997	28	24	26	24	22	18	28	2	1	1	2	2	8
117	1229040	1	0	3	26.99	1.057	26	28	22	18	20	18	28	1	1	1	1	1	5
118	1332272	1	0	2	21.43	1.13	22	26	24	18	18	20	26	2	1	1	2	3	9
119	1134568	1	0	3	23.664	1.02	26	24	28	20	22	22	28	1	1	1	2	2	7
120	1330271	0	0	0	21.948	1.0822	18	20	18	20	16	18	20	3	1	1	2	3	10
121	1317376	0	0	1	30.712	1.0464	32	36	30	28	26	22	36	3	1	1	2	3	10
122	1335982	0	0	0	28.77	1.21	32	28	30	28	26	28	32	3	1	1	2	4	11
123	1335938	1	0	3	16.6732	0.592	18	20	16	16	14	16	20	2	1	1	2	1	7
124	1335962	0	0	0	15.142	0.841	12	14	10	12	10	10	14	2	1	1	2	2	8
125	1338553	1	0	2	19.396	1.12	12	14	12	10	10	10	14	1	1	1	1	3	7
126	1258966	1	0	2	16.692	1.27	12	14	14	10	12	10	14	2	1	1	2	2	8
127	899988	0	0	0	26.022	1.024	32	36	32	28	30	30	36	3	1	1	2	3	10
128	1339813	0	0	2	23.616	0.711	16	12	14	14	14	10	16	1	1	1	2	2	7
129	1279948	1	0	3	28.61	1.19	22	20	24	18	20	20	24	2	1	1	2	3	9
130	1338829	1	0	4	30.47	1.16	14	12	14	12	14	8	14	1	1	1	1	2	6
131	1338584	0	0	0	29.298	1.48	36	34	30	28	24	30	36	4	1	1	2	4	12
132	1285617	0	0	0	31.016	1.34	36	32	34	30	28	32	36	3	1	1	2	4	11
133	1337163	1	0	5	9.266	0.571	12	10	6	6	8	6	12	0	1	1	1	1	4
134	1339885	0	0	0	35.496	0.951	26	30	32	22	24	22	32	2	1	1	2	3	9
135	1317574	1	0	2	13.45	0.707	10	8	10	8	8	6	10	1	1	1	2	2	7
136	1227045	0	0	0	17.68	0.64	24	24	24	22	20	16	24	3	1	1	2	3	10
137	1340022	0	0	1	15.03	0.9	28	26	26	24	22	22	28	3	1	1	2	4	11
138	1344452	0	0	1	18.11	0.7314	28	26	20	24	24	24	28	2	1	1	2	2	8
139	1343955	1	0	2	23.67	0.932	36	32	36	30	26	28	36	3	1	1	2	4	11

Sr. No.	MRD. NO.	INITIALS	AGE	SEX	OCCUPATION	FATIQUE	WEAKNESS	LETHARGY	LOOSE STOOLS	STIGMATA OF LIVER DISEASE	FEVER	OTHERS	DIABETESMELLITUS	HYPERTENSION	BRONCHIALASTHMA	HYPOTHYROIDISM	CAD	OTHERS
140	319442	BS	81	M	FARMER	Y	Y	N	N	N	N	FEVER	Y	N	N	N	Y	-
141	1335306	SK	41	F	HOUSEWIFE	N	N	N	N	N	N	FEVER	N	N	N	N	N	-
142	828950	AS	54	M	FARMER	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
143	1342245	SK	42	M	BUSINESSMAN	N	N	N	Y	N	N	N	N	N	N	N	N	-
144	1345032	G	31	M	FARMER	N	N	N	N	N	N	FEVER	N	N	N	N	N	-
145	1345082	VK	63	F	HOUSEWIFE	N	N	N	N	N	N	FEVER	N	Y	N	N	N	-
146	1345050	RS	65	M	BUSINESSMAN	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
147	1338241	SR	62	F	HOUSEWIFE	N	N	N	N	N	N	COUGH	N	N	N	Y	N	OLD TREATED KOCH
148	1317405	KK	51	F	HOUSEWIFE	N	N	N	Y	N	N	N	N	N	N	N	N	-
149	1224844	RK	45	F	HOUSEWIFE	Y	Y	N	N	N	N	N	N	N	N	N	N	-
150	1348796	GS	52	M	FARMER	N	N	N	N	N	N	SHORTNESS OF BREATH	N	Y	N	N	N	-
151	168747	RKS	83	M	RETIRED	N	N	N	N	N	Y	PAIN ABDOMEN	Y	Y	N	N	N	-
152	1353666	RS	27	M	STUDENT	N	N	N	Y	N	N	N	N	N	N	N	N	-
153	1354108	GS	58	M	FARMER	Y	Y	N	N	N	N	N	N	N	N	N	N	-
154	1318289	AS	71	M	BUSINESSMAN	N	N	N	Y	N	N	N	N	Y	N	N	N	-
155	1352873	DL	58	M	BUSINESSMAN	N	N	N	N	N	Y	N	N	N	N	N	N	-
156	1342774	N	35	F	HOUSEWIFE	Y	Y	N	Y	N	N	N	N	N	N	N	N	-
157	1349476	JS	40	M	FARMER	Y	Y	N	N	N	N	ALTERED SENSORIUM	N	N	N	N	N	-
158	1348028	KK	23	F	STUDENT	N	N	N	Y	N	N	N	N	N	N	N	N	-
159	1353029	SS	80	M	RETIRED	N	Y	N	N	N	N	N	N	Y	N	Y	N	OLD TREATED KOCH
160	1346334	R	32	F	HOUSEWIFE	N	N	N	Y	N	N	N	N	N	N	N	N	-
161	1354836	SB	74	F	HOUSEWIFE	N	N	N	N	N	N	COUGH	N	Y	N	N	N	-
162	1346853	RK	71	M	RETIRED	N	N	N	N	N	N	BURNING MICTURATION	Y	N	N	N	N	OLD TREATED KOCH
163	1353112	KD	70	F	HOUSEWIFE	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	Y	N	-
164	1349514	T	19	M	STUDENT	N	N	N	N	N	N	FEVER	N	N	N	N	N	-
165	1354831	HK	79	F	HOUSEWIFE	N	N	N	Y	N	N	N	Y	Y	N	N	N	-
166	1353680	MS	72	M	FARMER	Y	Y	N	N	N	N	CONSTIPATION	N	N	N	N	N	CHRONIC AF
167	1172343	JK	65	F	HOUSEWIFE	N	N	N	N	N	N	VOMITING	N	Y	N	N	N	-
168	1328695	GS	45	M	FARMER	N	N	N	N	N	Y	N	N	N	N	N	N	-
169	1359676	BD	63	M	BUSINESSMAN	N	N	N	Y	N	N	N	Y	Y	N	N	N	-
170	1358965	PK	65	F	HOUSEWIFE	N	N	N	Y	N	N	N	N	N	N	N	N	-
171	1361542	SD	59	F	HOUSEWIFE	N	N	N	N	N	N	COUGH	N	N	N	N	N	-
172	1363507	GS	23	M	STUDENT	N	N	N	Y	N	N	N	N	N	N	N	N	-
173	1362729	CS	52	M	FARMER	N	N	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
174	1362776	AS	54	M	BUSINESSMAN	N	N	N	N	N	Y	PAIN ABDOMEN	N	Y	N	N	N	OLD TREATED KOCH
175	1364579	KK	40	F	HOUSEWIFE	N	N	N	N	N	Y	COUGH	N	N	N	N	N	-
176	1353115	RS	64	M	BUSINESSMAN	Y	Y	N	N	N	N	ALTERED SENSORIUM	N	Y	N	N	N	-
177	1146281	KL	59	F	HOUSEWIFE	N	N	N	Y	N	N	N	N	N	N	N	N	OLD TREATED KOCH
178	1364206	KK	50	F	HOUSEWIFE	Y	Y	N	N	N	N	PAIN ABDOMEN	N	Y	N	Y	N	OLD TREATED KOCH
179	1367746	RR	54	M	BUSINESSMAN	N	N	N	N	N	N	SHORTNESS OF BREATH	N	N	N	N	N	-
180	1357352	D	63	M	BUSINESSMAN	Y	Y	N	N	N	Y	N	N	Y	N	N	N	-
181	1365128	SPS	53	M	BUSINESSMAN	Y	Y	N	N	N	N	PAIN ABDOMEN	N	N	N	N	N	-
182	1365000	HS	48	M	FARMER	Y	Y	N	Y	N	N	N	N	Y	N	N	N	-
183	1317405	KK	51	F	HOUSEWIFE	N	N	N	N	Y	Y	N	N	N	N	N	N	-
184	1355635	JK	53	F	HOUSEWIFE	N	N	N	N	N	N	BURNING MICTURATION	Y	N	N	N	N	-
185	1355638	BD	68	F	HOUSEWIFE	Y	Y	N	N	N	Y	N	Y	N	N	N	N	OLD TREATED KOCH
186	659199	HK	92	F	HOUSEWIFE	Y	Y	N	N	N	N	PAIN ABDOMEN	N	Y	N	Y	N	OLD TREATED KOCH
187	1363301	SD	48	F	HOUSEWIFE	N	N	N	N	Y	N	N	N	N	N	N	N	-
188	1368435	NM	45	F	HOUSEWIFE	Y	Y	N	N	N	N	N	N	N	N	Y	N	-
189	1357382	DK	65	F	HOUSEWIFE	N	N	N	N	N	N	CONSTIPATION	N	N	N	N	N	-
190	1360873	SD	65	F	HOUSEWIFE	N	N	N	Y	N	N	N	N	N	N	Y	N	-
191	1369391	KK	16	F	STUDENT	N	N	N	N	N	N	CONSTIPATION	N	N	N	N	N	-
192	1369536	SK	56	F	HOUSEWIFE	N	N	N	Y	N	N	PAIN ABDOMEN	N	N	N	N	N	-
193	1369772	JS	70	M	RETIRED	N	N	N	N	N	N	LOSS OF APETITE	N	Y	N	N	N	-
194	1368380	S	27	M	STUDENT	N	N	N	N	N	Y	COUGH	N	N	N	N	N	-
195	1364491	SK	54	F	HOUSEWIFE	N	N	N	Y	N	N	N	N	N	N	N	N	-
196	1369418	PS	23	F	STUDENT	N	N	N	N	Y	N	PAIN ABDOMEN	N	N	N	N	N	-
197	1369380	NPK	38	F	HOUSEWIFE	N	N	N	N	N	N	PAIN ABDOMEN CONSTIPATION	N	N	N	N	N	-
198	1376738	S	37	F	HOUSEWIFE	N	N	N	N	N	N	VOMITING	N	N	N	N	N	-
199	1374497	A	27	M	STUDENT	Y	Y	Y	Y	N	N	N	N	N	N	N	N	-
200	1370917	SK	67	M	BUSINESSMAN	N	N	N	N	N	Y	N	N	Y	N	N	N	-

Sr. No.	MRD. NO.	TREATMENT HISTORY	ALCOHOL	SMOKING	ALCOHOL QUANTITIY (GM/DAY)	ALCOHOL DURATION (YEARS)	SMOKING QUANTITY	SMOKING DURATION	VEGAN	LACTO-OVO-VEGETARIAN	PESCO-VEGETARIAN	SEMI-VEGETARIAN	NON-VEGETARIAN	HR	RR	SpO2	SBP	DBP	FEVER	PALLOR	EDEMA	JAUNDICE	JVP	CYANOSIS
140	319442	TAB METFORMIN- GLIMIPRIDE BD CAP ECOSPRIN-AV 75/20	N	N	-	-	N	N	N	N	N	N	Y	82	18	96	110	80	N	N	N	N	N	N
141	1335306	N	N	N	-	-	N	N	N	N	N	N	Y	82	18	98	110	80	N	N	N	N	N	N
142	828950	N	Y	N	62	20	N	N	N	N	N	N	Y	72	18	96	120	90	N	N	N	N	N	N
143	1342245	N	N	N	-	-	N	N	N	N	N	N	Y	96	16	99	120	90	N	N	N	N	N	N
144	1345032	N	N	N	-	-	N	N	N	N	N	N	Y	82	16	98	110	80	N	N	N	N	N	N
145	1345082	TAB TELMA 40MG OD	N	N	-	-	N	N	N	N	N	N	Y	84	18	97	110	80	N	N	N	N	N	N
146	1345050	N	Y	N	120	25	N	N	N	N	N	N	Y	68	18	98	110	90	N	N	N	N	N	N
147	1338241	TAB ELTROXIN 75 MCG OD	N	N	-	-	N	N	N	Y	N	N	N	80	18	98	110	80	N	N	N	N	N	N
148	1317405	N	N	N	-	-	N	N	N	N	N	N	Y	86	16	98	110	80	N	N	N	N	N	N
149	1224844	N	N	N	-	-	N	N	N	Y	N	N	N	92	18	96	140	90	N	N	N	N	N	N
150	1348796	N	N	N	-	-	N	N	N	N	N	N	Y	81	16	98	110	80	N	N	N	N	N	N
151	168747	TAB TELMA 40MG OD TAB METFORMIN- GLIMIPRIDE OD	N	N	-	-	N	N	N	N	N	N	Y	74	16	97	120	90	N	N	N	N	N	N
152	1353666	N	N	N	-	-	N	N	N	N	N	N	Y	78	18	98	120	90	N	N	N	N	N	N
153	1354108	N	N	N	-	-	N	N	N	N	N	N	Y	81	18	98	110	80	N	N	N	N	N	N
154	1318289	TAB AMLONG 5MG BD	N	N	-	-	N	N	N	N	N	N	Y	88	18	98	120	90	N	N	N	N	N	N
155	1352873	N	Y	N	60	5	N	N	N	N	N	N	Y	72	18	96	120	90	N	N	N	N	N	N
156	1342774	N	N	N	-	-	N	N	N	N	N	N	Y	82	16	98	110	80	N	N	N	N	N	N
157	1349476	N	N	N	-	-	N	N	N	N	N	N	Y	80	18	98	120	90	N	N	N	N	N	N
158	1348028	N	N	N	-	-	N	N	N	Y	N	N	N	68	18	98	110	80	N	N	N	N	N	N
159	1353029	TAB ELTROXIN 50MCG OD TAB AMLONG 5 MG OD	N	N	-	-	N	N	N	N	N	N	Y	80	16	98	110	80	N	N	N	N	N	N
160	1346334	N	N	N	-	-	N	N	N	N	N	N	Y	84	18	98	110	80	N	N	N	N	N	N
161	1354836	TAB TELMA 40MG OD	N	N	-	-	N	N	N	N	N	N	Y	86	16	98	120	90	N	N	N	N	N	N
162	1346853	INJ MIXTARD INSULIN	N	N	-	-	N	N	N	N	N	N	Y	82	16	98	110	80	N	N	N	N	N	N
163	1353112	TAB ELTROXIN 50MCG OD	N	N	-	-	N	N	N	Y	N	N	N	82	16	98	110	80	N	N	N	N	N	N
164	1349514	N	N	N	-	-	N	N	N	Y	N	N	N	84	18	98	110	80	N	N	N	N	N	N
165	1354831	TAB AMLONG 5MG OD TAB GLYCOMET GP1 BD	N	N	-	-	N	N	N	N	N	N	Y	82	18	96	110	80	N	N	N	N	N	N
166	1353680	TAB CARDORONE 100MG BD	Y	N	250	40	N	N	N	N	N	N	Y	81	18	96	110	80	N	N	N	N	N	N
167	1172343	TAB TELMA 40MG OD	N	N	-	-	N	N	N	N	N	N	Y	82	18	98	110	80	N	N	N	N	N	N
168	1328695	N	Y	N	125	20	N	N	N	N	N	N	Y	86	18	96	110	80	N	N	N	N	N	N
169	1359676	TAB AMLONG 5 MG OF TAB METFORMIN/GLIMIPRIDE BD	N	N	-	-	N	N	N	N	N	N	Y	82	20	97	110	80	N	N	N	N	N	N
170	1358965	N	N	N	-	-	N	N	N	Y	N	N	N	68	18	98	110	80	N	N	N	N	N	N
171	1361542	N	N	N	-	-	N	N	N	N	N	N	Y	84	16	96	120	90	N	N	N	N	N	N
172	1363507	N	N	N	-	-	N	N	N	N	N	N	Y	88	18	96	110	80	N	N	N	N	N	N
173	1362729	N	N	N	-	-	N	N	N	N	N	N	Y	81	18	96	110	90	N	N	N	N	N	N
174	1362776	TAB AMLONG 5MG OD	N	N	-	-	N	N	N	N	N	N	Y	64	16	98	110	80	N	N	N	N	N	N
175	1364579	N	N	N	-	-	N	N	N	N	N	N	Y	72	18	98	120	80	N	N	N	N	N	N
176	1353115	TAB TELMA H 40/12.5MG OD	N	N	-	-	N	N	N	N	N	N	Y	84	18	98	110	90	N	N	N	N	N	N
177	1146281	N	N	N	-	-	N	N	N	Y	N	N	N	81	18	96	110	80	N	N	N	N	N	N
178	1364206	TAB TELMA 40MG OD TAB ELTROXIN 25MCG OD	N	N	-	-	N	N	N	N	N	N	Y	72	18	97	120	80	N	N	N	N	N	N
179	1367746	N	N	N	-	-	N	N	N	N	N	N	Y	74	16	96	110	80	N	N	N	N	N	N
180	1357352	TAB TELMA-AM OD	N	N	-	-	N	N	N	N	N	N	Y	78	20	96	120	90	N	N	N	N	N	N
181	1365128	N	N	N	-	-	N	N	N	N	N	N	Y	74	16	98	120	80	N	N	N	N	N	N
182	1365000	TAB TELM 40MG OD	N	N	-	-	N	N	N	N	N	N	Y	74	18	96	120	80	N	N	N	N	N	N
183	1317405	N	N	N	-	-	N	N	N	N	N	N	Y	82	16	96	120	90	N	N	N	N	N	N
184	1355635	INJ MIXTARD INSULIN	N	N	-	-	N	N	N	N	N	N	Y	86	18	96	110	80	N	N	N	N	N	N
185	1355638	TAB GLYCOMET GP1 OD	N	N	-	-	N	N	N	Y	N	N	N	80	18	98	110	80	N	N	N	N	N	N
186	659199	TAB ELTROXIN 50MCG OD	N	N	-	-	N	N	N	Y	N	N	N	81	16	98	110	80	N	N	N	N	N	N
187	1363301	N	N	N	-	-	N	N	N	N	N	N	Y	82	18	98	120	80	N	N	N	N	N	N
188	1368435	TAB ELTROXIN 25MCG OD	N	N	-	-	N	N	N	N	N	N	Y	74	16	98	120	90	N	N	N	N	N	N
189	1357382	N	N	N	-	-	N	N	N	N	N	N	Y	64	18	98	110	90	N	N	N	N	N	N
190	1360873	TAB ELTROXIN 75MCG OD	N	N	-	-	N	N	N	N	N	N	Y	76	18	98	120	90	N	N	N	N	N	N
191	1369391	N	N	N	-	-	N	N	N	N	N	N	Y	72	16	98	110	80	N	N	N	N	N	N
192	1369536	N	N	N	-	-	N	N	N	Y	N	N	N	82	18	98	120	90	N	N	N	N	N	N
193	1369772	TAB TELMA AM 40/5 BD	N	N	-	-	N	N	N	N	N	N	Y	76	14	98	120	80	N	N	N	N	N	N
194	1368380	N	N	N	-	-	N	N	N	N	N	N	Y	74	18	96	120	90	N	N	N	N	N	N
195	1364491	N	N	N	-	-	N	N	N	N	N	N	Y	82	18	96	110	80	N	N	N	N	N	N
196	1369418	N	N	N	-	-	N	N	N	N	N	N	Y	76	16	98	110	80	N	N	N	N	N	N
197	1369380	N	N	N	-	-	N	N	N	N	N	N	Y	68	18	98	120	80	N	N	N	N	N	N
198	1376738	N	N	N	-	-	N	N	N	N	N	N	Y	82	18	98	110	80	N	N	N	N	N	N
199	1374497	N	N	N	-	-	N	N	N	N	N	N	Y	74	18	96	120	90	N	N	N	N	N	N
200	1370917	TAB TELMA 40MG OD	N	N	-	-	N	N	N	Y	N	N	N	80	18	96	120	90	N	N	N	N	N	N

Sr. No.	MRD. NO.	LYMPHADENOPATHY	BODY WEIGHT	HEIGHT	BMI	WAIST CIRCUMFERENCE	HIP CIRCUMFERENCE	MID- ARM CIRCUMFERENCE	SUBCUTANEOUS FAT STORES UNDER THE EYES	BICEPS	TRICEPS	MUSCLE WASTING TEMPLE	CLAVICLE	SHOULDER	QUADRICEPS	CALF	KNEE	CNS	CVSS1	CVS S2
140	319442	N	96	1.854	27.92	98	102	36	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
141	1335306	N	98	1.67	35.139	106	108	36	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
142	828950	N	62	1.72	20.95	88	90	24	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
143	1342245	N	105	1.829	31.387	96	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
144	1345032	N	90	1.72	30.421	82	86	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
145	1345082	N	65	1.6	25.39	94	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
146	1345050	N	70	1.7	24.221	86	88	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
147	1338241	N	52	1.62	19.81	78	82	24	FAIR	FAIR	FAIR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
148	1317405	N	72	1.52	31.163	96	98	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
149	1224844	N	95	1.65	34.89	96	100	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
150	1348796	N	62	1.65	22.77	82	86	24	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
151	168747	N	58	1.7	20.06	86	88	28	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
152	1353666	N	52	1.77	16.598	78	82	24	POOR	POOR	POOR	POOR	POOR	POOR	POOR	POOR	POOR	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
153	1354108	N	50	1.67	17.92	84	86	26	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
154	1318289	N	85	1.77	27.13	96	100	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
155	1352873	N	78	1.778	24.67	92	96	36	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
156	1342774	N	42	1.6	16.4062	78	80	24	POOR	POOR	POOR	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
157	1349476	N	63	1.82	19.01	86	88	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
158	1348028	N	48	1.55	17.89	82	84	24	FAIR	FAIR	FAIR	POOR	POOR	POOR	POOR	POOR	POOR	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
159	1353029	N	65	1.626	24.58	88	90	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
160	1346334	N	55	1.67	19.72	88	92	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
161	1354836	N	84	1.7	29.065	88	90	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
162	1346853	N	60	1.72	20.281	84	86	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
163	1353112	N	70	1.7	24.22	96	98	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
164	1349514	N	55	1.67	19.72	78	82	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
165	1354831	N	85	1.75	27.75	96	98	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
166	1353680	N	66	1.8	20.37	90	94	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
167	1172343	N	50	1.575	20.156	96	98	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
168	1328695	N	90	1.7	31.141	104	108	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
169	1359676	N	60	1.65	22.038	94	98	24	FAIR	FAIR	FAIR	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
170	1358965	N	60	1.62	22.86	92	96	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
171	1361542	N	55	1.6	21.48	92	94	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
172	1363507	N	54	1.8	16.66	82	84	24	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
173	1362729	N	56	1.67	20.08	86	90	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
174	1362776	N	80	1.72	27.04	94	98	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
175	1364579	N	78	1.55	32.46	98	100	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
176	1353115	N	85	1.82	25.6	94	98	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
177	1146281	N	71	1.67	25.45	94	98	24	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
178	1364206	N	63	1.65	23.1	88	90	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
179	1367746	N	75	1.75	24.48	94	96	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
180	1357352	N	90	1.65	33.057	106	108	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
181	1365128	N	96	1.7	33.21	102	106	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
182	1365000	N	86	1.78	27.143	92	96	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
183	1317405	N	56	1.52	24.24	86	88	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
184	1355635	N	65	1.626	24.6	92	96	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
185	1355638	N	47	1.57	19.06	82	84	24	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
186	659199	N	70	1.62	26.67	94	96	24	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
187	1363301	N	48	1.57	19.47	80	82	24	FAIR	FAIR	FAIR	POOR	POOR	POOR	POOR	POOR	POOR	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
188	1368435	N	62	1.57	25.15	86	88	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
189	1357382	N	57	1.62	21.71	88	94	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
190	1360873	N	92	1.7	31.83	106	108	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
191	1369391	N	56	1.62	21.34	82	86	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
192	1369536	N	57.8	1.52	25.01	86	92	32	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
193	1369772	N	56	1.62	21.34	84	88	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
194	1368380	N	55	1.62	20.95	84	86	24	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
195	1364491	N	59	1.52	25.53	82	84	24	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
196	1369418	N	52	1.6	20.3125	86	88	26	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
197	1369380	N	75	1.65	27.64	92	98	34	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
198	1376738	N	86	1.67	30.836	92	96	28	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
199	1374497	N	64	1.72	21.63	84	88	24	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N
200	1370917	N	94	1.72	31.77	98	96	36	GOOD	GOOD	GOOD	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PATIENT IS ORIENTED TO TIME PLACE AND PERSON	N	N

Sr. No.	MRD. NO.	CVS ANY ADDED SOUNDS	RESPIRATORY SYSTEM	INSPECTION SHAPE OF ABDOMEN	INSPECTION SKIN	INSPECTION ANY VENOUS PROMINENCE	INSPECTION VISIBLE PERISTALSIS	INSPECTION HERNIA SITES	SUPERFICIAL TEMP	SUPERFICIAL TENDERNESS	DEEP ANY LOCALISED LUMP	DEEP ORGANOMEGALY	DEEP LIVER SIZE	DEEP LIVER CONSISTENCY	DEEP LIVER MARGIN	DEEP LIVER TENDERNESS	PERCUSSION GENERAL NOTE OF ABDOMEN
140	319442	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
141	1335306	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
142	828950	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
143	1342245	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
144	1345032	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
145	1345082	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
146	1345050	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
147	1338241	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
148	1317405	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
149	1224844	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
150	1348796	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
151	168747	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
152	1353666	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
153	1354108	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
154	1318289	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
155	1352873	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
156	1342774	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
157	1349476	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
158	1348028	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
159	1353029	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
160	1346334	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
161	1354836	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
162	1346853	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
163	1353112	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
164	1349514	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
165	1354831	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
166	1353680	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
167	1172343	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
168	1328695	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
169	1359676	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
170	1358965	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
171	1361542	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
172	1363507	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
173	1362729	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
174	1362776	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
175	1364579	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
176	1353115	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
177	1146281	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
178	1364206	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
179	1367746	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
180	1357352	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
181	1365128	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
182	1365000	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
183	1317405	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
184	1355635	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
185	1355638	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
186	659199	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
187	1363301	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
188	1368435	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
189	1357382	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
190	1360873	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
191	1369391	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
192	1369536	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
193	1369772	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
194	1368380	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
195	1364491	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
196	1369418	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
197	1369380	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
198	1376738	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
199	1374497	-	B/L A/E +	FLAT	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL
200	1370917	-	B/L A/E +	DISTENDED	NORMAL	N	N	N	AFEBRILE	NON TENDER	N	N	NON PALPABLE	-	-	-	DULL

Sr. No.	MRD. NO.	PERCUSSION UPPER BORDER OF LIVER	PERCUSSION SHIFTING DULLNESS	AUSCULTATION BOWEL SOUNDS	AUSCULTATION VENOUS HUM/ BRUIT	BILIRUBIN (TOTAL)	BILIRUBIN (DIRECT)	AST	ALT	ALP	TOTAL PROTEINS	ALBUMIN	INR	TRIGLYCERIDES	CHOLESTEROL	HDL CHOLESTEROL	LDL CHOLESTEROL	TLC	NEUTROPHILS	LYMPHOCYTES	MONOCYTES	EOSINOPHILS	BASOPHILS	HB	MCV
140	319442	5TH SPACE	N	NORMAL	N	0.7	0.17	23	39	91	6.5	4.02	1.26	134	174	62	122	6.5	88.4	6.1	4.5	0.7	0.3	13.8	86.1
141	1335306	6TH SPACE	N	NORMAL	N	1.02	0.41	14	27	67	6.7	3.58	1.52	136	176	62	136	8	76	19	5	0	0	12.3	87.8
142	828950	5TH SPACE	N	NORMAL	N	0.83	0.46	8	22	182	7.1	3.75	1.26	136	172	68	124	5.5	57.2	34.1	7.2	1.1	0.4	11.8	82.9
143	1342245	5TH SPACE	N	NORMAL	N	0.94	0.46	15	33	115	5.5	2.93	1.26	132	178	62	128	10.7	83	14.2	2.6	0.1	0.1	9.8	81.8
144	1345032	5TH SPACE	N	NORMAL	N	1.03	0.16	16	39	95	8.1	5	1.23	138	168	72	132	10.8	81.6	14.2	4.1	0.1	0	14.5	98
145	1345082	5TH SPACE	N	NORMAL	N	0.82	0.51	19	33	88	7	3.78	1.23	134	172	68	124	6.75	54.6	39.6	4.8	0.8	0.2	9.5	75.8
146	1345050	6TH SPACE	N	NORMAL	N	0.52	0.38	16	37	99	5.9	3.5	1.38	138	164	62	132	7.4	72.3	17.3	9.3	0.7	0.4	11.6	94.1
147	1338241	5TH SPACE	N	NORMAL	N	0.81	0.62	12	38	86	5.6	3.4	1.38	132	176	64	128	11.78	81.9	10	8	0	0.1	11.2	79.9
148	1317405	6TH SPACE	N	NORMAL	N	0.35	0.15	12	25	86	7.9	3.87	1.03	138	168	62	124	5.29	84.6	8.9	6	0.3	0.2	11.5	87.4
149	1224844	5TH SPACE	N	NORMAL	N	0.5	0.15	16	33	78	7.6	3.84	1.26	132	158	52	76	13.3	62.5	25.8	1	1.5	0.2	12.7	78
150	1348796	6TH SPACE	N	NORMAL	N	0.46	0.07	11	26	122	7.5	3.81	1.49	136	164	50	82	11.6	77	19.6	2.1	0.9	0.4	16.8	87.8
151	168747	5TH SPACE	N	NORMAL	N	1.04	0.61	19	38	128	6.8	3.03	1.18	132	172	58	76	12.08	93.2	4.8	0.6	1	0.4	10.9	87.1
152	1353666	5TH SPACE	N	NORMAL	N	0.67	0.26	15	37	90	6.4	3.33	1.12	136	168	62	72	12.12	58	21.4	5.8	14.3	0.5	10.8	67.4
153	1354108	5TH SPACE	N	NORMAL	N	0.76	0.24	12	38	72	6.2	3.5	1.21	132	162	56	80	6	79.9	11.5	7.6	0.6	0.4	10.1	85.9
154	1318289	6TH SPACE	N	NORMAL	N	0.38	0.16	17	33	62	6.9	3.81	1.9	138	176	62	72	6.3	44.7	41.6	7.6	5.3	0.8	12.1	74.1
155	1352873	6TH SPACE	N	NORMAL	N	1.19	0.72	14	83	76	6.3	4.08	1.65	138	174	62	74	4.3	66.4	23.1	10.1	0.1	0.3	9.7	85.1
156	1342774	6TH SPACE	N	NORMAL	N	0.22	0.04	8	36	98	6.5	3.43	1.22	136	182	58	76	14.1	88.5	3.7	7.8	0	0	10.6	83.4
157	1349476	5TH SPACE	N	NORMAL	N	0.35	0.12	12	38	95	6.2	2.28	1.36	132	158	58	74	4.6	70.7	26.4	2.1	0.2	0.6	10.3	92.8
158	1348028	5TH SPACE	N	NORMAL	N	0.21	0.03	13	36	83	5.4	2.61	1.12	136	152	62	78	8.55	70.3	18.9	7.3	3.3	0.2	10	85.4
159	1353029	6TH SPACE	N	NORMAL	N	0.8	0.2	11	31	86	6.4	3.39	1.09	138	172	58	72	6	60.5	26.6	10	2.4	0.5	9.7	94.9
160	1346334	6TH SPACE	N	NORMAL	N	0.98	0.2	11	41	83	4.3	2.19	1.52	138	166	58	76	13.9	87.3	6.6	5.9	0	0.2	10.6	96
161	1354836	6TH SPACE	N	NORMAL	N	0.49	0.17	13	32	84	6.3	3.99	1.38	132	134	68	74	10.6	70.9	17.3	10.6	0.6	0.6	12.2	84
162	1346853	5TH SPACE	N	NORMAL	N	0.64	0.21	18	38	64	6.4	3.1	1.26	134	168	58	64	12.9	90.3	2.3	2.5	2.7	0.2	9.2	86.6
163	1353112	5TH SPACE	N	NORMAL	N	1.09	0.26	19	36	91	7.7	4.87	1.43	134	162	54	72	10.18	67.8	21.7	10.3	0.2	0	15.7	90.7
164	1349514	6TH SPACE	N	NORMAL	N	0.83	0.44	15	39	154	5.9	3.49	1.95	134	172	68	72	9.6	84.7	8.2	4.9	1.4	0.8	15.1	83.9
165	1354831	5TH SPACE	N	NORMAL	N	0.55	0.28	15	38	97	7.3	3.93	1.28	134	162	52	78	4.8	60	30	8	2	0	11.6	77.9
166	1353680	6TH SPACE	N	NORMAL	N	0.74	0.44	19	36	80	5.8	3.71	1.16	138	156	62	72	12.23	61	33.7	4.7	0.4	0.2	11.4	92
167	1172343	5TH SPACE	N	NORMAL	N	0.28	0.17	8	19	48	4.9	2.95	1.48	138	158	56	74	6.6	85.7	4.3	8.9	0.9	0.2	9.4	69.7
168	1328695	5TH SPACE	N	NORMAL	N	0.83	0.16	18	37	49	5.8	3.76	1.26	132	178	56	74	5.28	82.1	9.6	8.1	0.2	0	15	97.2
169	1359676	6TH SPACE	N	NORMAL	N	0.69	0.36	7	18	72	4.6	2.07	1.22	132	154	54	68	13.4	94.2	4.2	0.6	0.8	0.2	10.6	99.6
170	1358965	6TH SPACE	N	NORMAL	N	0.62	0.22	11	20	98	5.1	2.53	1.42	138	152	52	68	8.1	85.1	6	6.5	2.3	0.1	10.6	82.3
171	1361542	5TH SPACE	N	NORMAL	N	0.25	0.14	12	24	75	6.6	3.61	1.04	138	164	54	68	7.06	62.7	27.5	6.4	3.2	0.2	9	84.7
172	1363507	6TH SPACE	N	NORMAL	N	0.39	0.2	14	36	60	6.5	3.94	1.39	138	162	62	76	7.4	70	21.9	6.7	0.9	0.5	16.6	95.5
173	1362729	5TH SPACE	N	NORMAL	N	0.43	0.12	12	28	113	5.8	3.1	1.07	138	164	64	68	6.46	93.1	4.9	2	0	0	10.1	88.4
174	1362776	5TH SPACE	N	NORMAL	N	0.49	0.21	6	24	90	6.4	3.95	1.08	134	178	56	74	8.4	79.3	12.3	8.1	0.1	0.1	12.9	81.1
175	1364579	6TH SPACE	N	NORMAL	N	0.6	0.37	14	32	78	5.5	2.9	1.13	134	162	58	74	4.8	70.6	20.9	8.2	0.1	0.2	9.7	76.1
176	1353115	5TH SPACE	N	NORMAL	N	0.67	0.2	9	19	98	7.2	4.59	1.05	104	208	64	120	14.64	79.1	14	6.4	0.3	0.2	15.3	93.4
177	1146281	5TH SPACE	N	NORMAL	N	0.38	0.19	6	15	77	7.3	4.35	1.06	132	164	54	66	9.6	77.3	16.6	3.9	1.8	0.4	12.8	85.1
178	1364206	5TH SPACE	N	NORMAL	N	0.39	0.1	10	30	73	6.82	4.32	1.26	132	164	62	78	10.49	82	13.5	4.4	0	0.1	10.7	76.3
179	1367746	6TH SPACE	N	NORMAL	N	0.76	0.09	13	29	68	6.6	3.67	1.16	132	168	62	74	7	75	16.2	8.6	0	0	13.4	95.4
180	1357352	5TH SPACE	N	NORMAL	N	1.07	0.23	7	16	47	6.7	2.91	1.4	132	158	58	74	16.54	91.7	4.6	3.1	0.5	0.1	15.9	103.4
181	1365128	6TH SPACE	N	NORMAL	N	0.54	0.21	15	33	60	7.1	4.28	1.14	138	214	37	61	11.4	75.4	12.9	6.4	4.8	0.5	10.1	89.5
182	1365000	5TH SPACE	N	NORMAL	N	0.63	0.42	12	33	68	6.8	4.63	1.23	132	168	62	78	5.33	68.7	21.4	4.6	4.4	0.9	15.2	87.4
183	1317405	6TH SPACE	N	NORMAL	N	0.86	0.42	14	29	83	6.4	2.8	1.36	134	156	56	62	4	72.2	17.3	10.3	0	0.2	10.2	70.3
184	1355635	6TH SPACE	N	NORMAL	N	0.87	0.64	15	29	109	5.9	3.03	1.36	136	168	62	76	14.57	91	3.8	4.6	0.6	0	9.5	84.4
185	1355638	5TH SPACE	N	NORMAL	N	0.24	0.16	14	27	107	6.7	4.2	1.48	136	154	56	78	9.2	75.8	16.1	7.6	0.3	0.2	11.8	74.9
186	659199	5TH SPACE	N	NORMAL	N	0.42	0.3	6	15	105	5.5	2.3	1.18	134	162	56	68	9.5	78.2	9.5	10.8	1.1	0.4	10.1	87.2
187	1363301	6TH SPACE	N	NORMAL	N	0.57	0.1	8	21	128	5.8	2.76	0.92	132	154	56	64	4.6	80.8	10.6	6	2.2	0.4	11.3	86.7
188	1368435	5TH SPACE	N	NORMAL	N	0.26	0.15	7	13	105	7.1	2.86	1.1	128	164	52	66	7.1	90.8	6.8	2.3	0	0.1	9.1	79
189	1357382	6TH SPACE	N	NORMAL	N	1.08	0.75	5	18	67	6.2	2.74	1.44	140	162	58	72	8.1	82	12.4	5.5	0	0.1	11.7	75.8
190	1360873	5TH SPACE	N	NORMAL	N	0.8	0.21	9	17	101	7.1	3.42	1.26	134	164	52	78	6.3	68.2	15.7	10.5	4.8	0.8	10.8	103.5
191	1369391	6TH SPACE	N	NORMAL	N	0.32	0.11	9	21	57	5.8	3.83	1.43	134	152	58	76	13.53	79.8	15.6	4	0.5	0.1	10.7	87.7
192	1369536	5TH SPACE	N	NORMAL	N	0.26	0.09	8	20	131	7	4.17	1.32	128	152	54	78	7.8	42.8	47.1	7.8	1.8	0.5	11.6	93
193	1369772	5TH SPACE	N	NORMAL	N	0.37	0.19	16	34	103	6.2	3.11	1.36	142	164	54	68	7.96	81.3	12.6	4.8	1.1	0.2	11.4	85.4
194	1368380	5TH SPACE	N	NORMAL	N	0.78	0.46	19	36	139	6.8	3.13	1.46	138	168	58	72	4.5	41.4	47.5	10.8	0	0.3	14.5	94
195	1364491	5TH SPACE	N	NORMAL	N	0.3	0.12	7	19	71	5.7	2.38	1.35	132	158	58	72	7.3	82.7	10.1	7.1	0.1	0	10.3	85.6
196	1369418	6TH SPACE	N	NORMAL	N	0.91	0.4	19	34	76	7.4	3.42	1.64	132	154	54	72	15.5	55.2	33.6	10.5	0.1	0.6	11.2	96.5
197	1369380	5TH SPACE	N	NORMAL	N	0.56	0.24	14	26	108	5.5	3.15	1.39	134	162	54	78	7.35	79.3	14.7	5.6	0.3	0.1	12.1	87.8
198	1376738	6TH SPACE	N	NORMAL	N	0.31	0.14	6	17	80	7.8	4.75	1.18	138	152	54	76	6.2	77.3	16.2	5.5	0.6	0.4	13.2	92.4
199	1374497	5TH SPACE	N	NORMAL	N	0.84	0.62	14	27	102	6.2	3.48	1.42	124	146	48	72	7.1	85.3	5.8	6.8	2	0.1	12.6	86.3
200	1370917	5TH SPACE	N	NORMAL	N	0.72	0.2	7	21	108	6.6	2.29	1.12	136	152	48	62	16.8	93.8	2.9	3.1	0.1	0.1	11	89.6

Sr. No.	MRD. NO.	PLATELET COUNT	UREA	CREATININE	NA+	K+	CL-	FBS	RBS	HB1Ac	HBsAg	ANTI-HCV	ANTI-HIV	ANY OTHER INVESTIGATION	HEPATIC STEATOSIS INDEX (HSI)	APRI	FIB-4 SCORE	BARD SCORE	NAFLD SCORE	GRADE OF FATTY LIVER	ANY OTHER SPECIFIC POINT	FIBROSCAN	SARC-F SCORING SYSTEM STRENGTH	SARC-F SCORING SYSTEM ASSISSTANCE IN WALKING	RISE FROM A CHAIR
140	319442	262	44	0.79	140	3.71	104	94	98	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	43.5	0.2	1	1	-1.9	2	-	-	2	1	1
141	1335306	249	46	0.94	141	4.05	102	106	110	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	52.6	0.1	0.47	1	-1.94	2	-	-	1	0	0
142	828950	353	20	0.73	135	4.91	95	116	118	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	43	0.1	0.26	0	-1.41	1	-	-	0	0	0
143	1342245	230	40	0.79	135	4.58	96	98	104	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	49	0.2	0.48	1	-1.65	2	-	-	1	0	0
144	1345032	206	24	0.66	138	4.87	103	91	96	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	49.9	0.6	0.39	1	-3.24	2	-	-	1	0	0
145	1345082	200	47	0.85	139	3.88	103	108	116	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	41.3	0.2	1.04	0	-1.48	3	-	-	0	0	0
146	1345050	220	42	1.54	138	3.85	100	78	82	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	42.7	0.2	0.78	0	-1.74	2	-	-	1	0	1
147	1338241	287	60	0.81	142	4.5	98	82	88	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	47.1	0.1	0.42	0	-3.18	2	-	-	1	0	0
148	1317405	266	61	0.51	141	4.37	103	84	90	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	49.8	0.1	0.46	1	-2.4	2	-	-	1	0	1
149	1224844	180	19	1.13	146	4.13	121	84	88	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	53.4	0.2	0.7	1	-1.12	2	-	-	1	0	0
150	1348796	311	58	1.59	137	4.35	103	110	114	6	NEGATIVE	NEGATIVE	NEGATIVE	-	41.7	0.1	0.36	0	-3.75	2	-	-	0	0	0
151	168747	313	70	1.92	137	4.22	100	126	132	6.9	NEGATIVE	NEGATIVE	NEGATIVE	-	38.1	0.2	0.82	1	-1.17	1	-	-	1	0	1
152	1353666	404	9	0.65	140	4.21	103	87	92	5.7	NEGATIVE	NEGATIVE	NEGATIVE	-	36.3	0.1	0.16	0	-6.16	1	-	-	1	0	0
153	1354108	190	60	1.42	141	4.33	104	96	102	5.5	NEGATIVE	NEGATIVE	NEGATIVE	-	43.3	0.2	0.59	0	-2.31	2	-	-	0	0	0
154	1318289	262	11	0.6	142	3.7	100	82	88	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	42.7	0.2	0.58	0	-2.65	2	-	-	0	0	0
155	1352873	270	27	0.64	135	4.6	92	96	102	5.7	NEGATIVE	NEGATIVE	NEGATIVE	-	43.5	0.1	0.52	0	-2.99	2	-	-	1	0	0
156	1342774	267	28	0.8	140	4.29	103	108	116	5.4	NEGATIVE	NEGATIVE	NEGATIVE	-	54.4	0.1	0.18	0	-4.22	1	-	-	1	0	0
157	1349476	340	10	0.54	138	4.63	109	96	98	5.2	NEGATIVE	NEGATIVE	NEGATIVE	-	44.3	0.1	0.23	0	-4.02	2	-	-	0	0	0
158	1348028	227	39	1.32	136	4.3	107	88	94	4.5	NEGATIVE	NEGATIVE	NEGATIVE	-	42	0.1	0.22	0	-3.46	2	-	-	1	0	0
159	1353029	201	46	0.96	132	4.2	98	90	96	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	47.1	0.1	0.79	0	-0.9	2	-	-	1	0	1
160	1346334	190	43	1.46	137	3.98	92	104	108	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	51.5	0.1	0.29	0	-2.29	2	-	-	0	0	0
161	1354836	218	19	0.68	136	4.11	93	94	98	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	52.4	0.1	0.72	1	-1.3	2	-	-	1	0	0
162	1346853	244	44	1.16	146	4.41	98	99	106	5.9	NEGATIVE	NEGATIVE	NEGATIVE	-	37.2	0.2	0.85	1	-1.89	1	-	-	1	0	1
163	1353112	248	16	1.24	135	3.84	98	104	108	5.7	NEGATIVE	NEGATIVE	NEGATIVE	-	48.4	0.1	0.61	0	-2.9	2	-	-	1	0	0
164	1349514	240	44	1.56	134	4.54	102	92	98	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	40.5	0.2	0.19	0	-4.23	1	-	-	0	0	0
165	1354831	281	25	0.61	140	3.82	92	86	94	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	52	0.1	0.68	1	-2	2	-	-	1	0	1
166	1353680	226	21	0.75	136	4.72	91	110	112	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	42.5	0.1	0.69	0	-2.13	3	-	-	1	0	0
167	1172343	286	47	1.36	135	4.28	107	96	102	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	41.2	0.1	0.42	0	-2.62	2	-	-	1	0	0
168	1328695	280	34	0.64	142	4.3	102	98	106	5.4	NEGATIVE	NEGATIVE	NEGATIVE	-	47.6	0.2	0.48	1	-2.72	1	-	-	0	0	0
169	1359676	328	35	0.54	137	4.52	95	104	108	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	44.6	0.1	0.32	1	-2.49	3	-	-	1	0	1
170	1358965	164	64	1.63	130	4.14	102	108	112	5.4	NEGATIVE	NEGATIVE	NEGATIVE	-	39.4	0.2	0.97	0	-0.39	1	-	-	1	0	0
171	1361542	232	42	1.65	132	4.5	98	96	102	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	39.5	0.1	0.62	0	-2.38	2	-	-	1	0	0
172	1363507	184	18	0.72	143	4.57	102	84	88	4.7	NEGATIVE	NEGATIVE	NEGATIVE	-	37.2	0.2	0.29	0	-3.87	1	-	-	0	0	0
173	1362729	370	41	0.64	148	3.82	109	102	108	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	38.7	0.1	0.32	0	-4.3	3	-	-	1	0	0
174	1362776	263	22	1.15	137	3.9	103	102	108	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	59	0.1	0.25	0	-2.92	2	-	-	1	0	1
175	1364579	290	37	0.81	136	3.43	100	82	86	4.4	NEGATIVE	NEGATIVE	NEGATIVE	-	52.7	0.1	0.34	1	-2.39	1	-	-	0	0	0
176	1353115	279	24	1.05	149	4.32	100	104	108	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	42.5	0.1	0.47	0	-3.09	2	-	-	1	0	0
177	1146281	290	3.8	0.81	139	3.71	105	98	106	3.8	NEGATIVE	NEGATIVE	NEGATIVE	-	47.5	0.1	0.32	0	-3.34	1	-	-	1	0	0
178	1364206	221	38	0.74	137	4.71	94	102	108	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	49.1	0.1	0.41	0	-3.05	2	-	-	1	0	0
179	1367746	226	36	0.64	139	3.56	105	84	88	5.2	NEGATIVE	NEGATIVE	NEGATIVE	-	42.3	0.1	0.58	0	-2.29	1	-	-	0	0	0
180	1357352	226	44	0.52	146	3.95	96	98	110	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	51.3	0.1	0.49	1	-0.67	1	-	-	1	0	0
181	1365128	228	45	1.03	137	4.47	104	76	92	6	NEGATIVE	NEGATIVE	NEGATIVE	-	50.2	0.2	0.61	1	-1.93	2	-	-	0	0	0
182	1365000	252	15	0.89	141	3.77	101	102	108	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	49.1	0.1	0.4	0	-3.32	2	-	-	1	0	0
183	1317405	415	26	1.6	142	4.3	102	98	108	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	42.8	0.1	0.32	0	-4.27	3	-	-	1	0	0
184	1355635	222	47	1.94	135	4.8	81	84	102	5.9	NEGATIVE	NEGATIVE	NEGATIVE	-	42.1	0.2	0.66	1	-1.78	1	-	-	1	0	1
185	1355638	286	27	0.7	136	4.67	81	92	94	4.6	NEGATIVE	NEGATIVE	NEGATIVE	TSH-0.739	38.5	0.1	0.64	1	-3.34	2	-	-	1	0	0
186	659199	266	46	0.96	132	4.3	103	108	114	4.4	NEGATIVE	NEGATIVE	NEGATIVE	-	48.7	0.1	0.54	0	-0.34	2	-	-	1	1	1
187	1363301	268	26	0.89	138	4.97	103	76	84	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	42.5	0.1	0.31	0	-3	1	-	-	1	0	0
188	1368435	327	63	0.73	132	4.97	96	92	98	4.6	NEGATIVE	NEGATIVE	NEGATIVE	-	42	0.1	0.27	0	-3.38	2	-	-	1	0	0
189	1357382	230	34	0.6	133	3.68	94	106	112	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	52.5	0.1	0.33	0	-1.75	1	-	-	1	0	1
190	1360873	151	23	0.76	137	4.12	109	108	112	4.4	NEGATIVE	NEGATIVE	NEGATIVE	-	48.9	0.1	0.94	1	0.03	2	-	-	1	0	1
191	1369391	240	27	0.48	140	4.1	105	98	104	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	42	0.1	0.13	0	-4.3	2	-	-	0	0	0
192	1369536	256	28	1.62	142	4.8	101	90	94	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	47	0.1	0.39	0	-2.94	2	-	-	1	0	0
193	1369772	286	37	1.19	136	4.2	96	90	96	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	38.3	0.1	0.67	0	-2.38	1	-	-	1	0	1
194	1368380	228	64	1.58	142	5.09	102	86	92	5.8	NEGATIVE	NEGATIVE	NEGATIVE	-	36.1	0.2	0.38	0	-3.21	2	-	-	1	0	0
195	1364491	587	33	0.57	144	5.07	88	146	153	13.3	NEGATIVE	NEGATIVE	NEGATIVE	-	51.3	0	0.15	1	-4.98	2	-	-	1	0	0
196	1369418	279	41	0.89	142	3.75	97	84	96	4.8	NEGATIVE	NEGATIVE	NEGATIVE	-	43.2	0.1	0.18	0	-4.42	1	-	-	0	0	0
197	1369380	286	19	0.52	138	4.2	100	98	102	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	44.4	0.1	0.36	0	-2.94	3	-	-	1	0	0
198	1376738	253	26	1.12	136	4.6	96	102	108	5.6	NEGATIVE	NEGATIVE	NEGATIVE	-	55.5	0.1	0.21	0	-3.49	1	-	-	1	0	0
199	1374497	204	23	1.46	146	4.26	98	98	102	4.4	NEGATIVE	NEGATIVE	NEGATIVE	-	37.1	0.2	0.36	0	-3.08	2	-	-	0	0	0
200	1370917	254	44	1.14	136	4.23	91	110	128	6	NEGATIVE	NEGATIVE	NEGATIVE	-	55.8	0.1	0.4	1	-0.7	3	-	-	1	0	0

Sr. No.	MRD. NO.	CLIMB STAIRS	FALLS	SARC-F TOTAL SCORE	APPENDICULAR SKELETAL MUSCLE MASS (ASM)	SKELETAL MUSCLE INDEX (SMI)	HAND GRIP STRENGTH1	HAND GRIP STRENGTH2	HAND GRIP STRENGTH3	HAND GRIP STRENGTH LEFT HAND1	HAND GRIP STRENGTH LEFT HAND2	HAND GRIP STRENGTH LEFT HAND3	HAND GRIP STRENGTH MAXIMUM READING	SHORT PHYSICAL PERFORMANCE BATTERY (SPPB) SCORE	BALANCE TEST FEET TOGETHER	BALANCE TEST SEMI TANDEM POSITION	BALANCE TEST TANDEM POSITION	8 FEET WALK TEST	TOTAL SPPB TEST SCORE
140	319442	1	0	5	32.62	1.168	32	30	30	26	26	24	32	2	1	1	2	1	7
141	1335306	0	0	1	28.012	0.7971	16	18	14	10	8	10	18	2	1	1	2	2	8
142	828950	0	0	0	24.952	1.191	20	22	18	16	18	16	22	1	1	1	2	2	7
143	1342245	0	0	1	37.4702	1.19	26	26	22	20	24	18	26	3	1	1	2	3	10
144	1345032	1	0	2	34.038	1.118	26	26	20	24	20	22	26	3	1	1	2	3	10
145	1345082	0	0	0	17.266	0.68	18	16	12	14	14	10	18	2	1	1	2	3	9
146	1345050	1	0	3	25.67	1.059	20	24	22	20	16	18	24	3	1	1	2	2	9
147	1338241	0	0	1	14.354	0.72	16	18	12	14	14	14	18	1	1	1	2	2	7
148	1317405	1	0	3	19.518	0.626	10	8	8	8	6	8	10	0	1	1	1	2	5
149	1224844	0	0	1	26.74	0.766	18	22	16	12	16	16	22	2	1	1	2	3	9
150	1348796	0	0	0	24.602	1.08	32	30	26	24	22	20	32	3	1	1	2	3	10
151	168747	2	0	4	20.97	1.048	22	26	20	16	18	18	26	1	1	1	1	2	6
152	1353666	0	0	1	25.548	1.53	16	18	14	12	14	14	18	3	1	1	2	3	10
153	1354108	1	0	1	21.2346	1.1856	24	24	20	20	16	18	24	2	1	1	2	3	9
154	1318289	0	0	0	31.248	1.51	28	24	24	24	20	22	28	3	1	1	2	3	10
155	1352873	1	0	2	28.91	1.172	24	28	22	18	22	20	28	2	1	1	2	2	8
156	1342774	0	0	1	14.39	0.877	12	10	6	8	8	10	12	2	1	1	2	1	7
157	1349476	0	0	0	27.348	1.438	28	24	26	22	20	18	28	3	1	1	2	4	11
158	1348028	0	0	1	15.428	0.86	18	14	16	14	12	12	18	2	1	1	2	2	8
159	1353029	2	0	4	22.4	0.911	24	22	26	20	18	22	26	1	1	1	2	3	8
160	1346334	0	0	0	18.41	0.93	18	22	16	14	16	16	22	3	1	1	2	2	9
161	1354836	1	0	2	21.604	0.744	22	18	20	16	16	18	22	0	1	1	1	2	5
162	1346853	1	0	3	22.798	1.124	28	28	24	24	22	16	28	2	1	1	2	2	8
163	1353112	1	0	2	18.58	0.7671	18	16	14	16	16	12	18	3	1	1	2	3	10
164	1349514	0	0	0	26.284	1.33	24	24	22	20	22	16	24	4	1	1	2	3	11
165	1354831	1	0	3	21.748	0.78	18	14	14	14	16	10	18	1	1	1	2	1	6
166	1353680	0	0	1	24.784	1.21	32	28	26	30	30	32	32	3	1	1	2	3	10
167	1172343	0	0	1	13.215	0.65	16	12	12	10	8	8	16	0	1	1	2	1	5
168	1328695	0	0	0	32.51	1.043	18	16	20	16	16	16	20	3	1	1	2	4	11
169	1359676	1	0	3	23.036	1.045	18	12	16	14	14	10	18	2	1	1	2	2	8
170	1358965	0	0	1	16	0.699	20	16	18	16	14	18	20	2	1	1	2	2	8
171	1361542	0	0	1	15.218	0.7084	22	16	18	18	18	14	22	2	1	1	1	2	7
172	1363507	0	0	0	26.662	1.6	30	34	28	24	22	26	34	3	1	1	2	4	11
173	1362729	0	0	1	23.294	1.16	24	28	26	20	20	14	28	3	1	1	2	3	10
174	1362776	0	0	2	29.338	1.086	26	22	20	22	24	20	26	2	1	1	2	3	9
175	1364579	0	0	0	22.302	0.68	28	24	24	20	20	18	28	3	1	1	2	4	11
176	1353115	0	0	1	30.364	1.18	24	22	24	20	16	16	24	2	1	1	2	1	7
177	1146281	1	0	2	19.668	0.77	28	26	22	24	20	16	28	3	1	1	2	3	10
178	1364206	0	0	1	18.442	0.79	22	18	14	20	18	18	22	2	1	1	2	1	7
179	1367746	0	0	0	28.358	1.1584	28	24	28	20	20	20	28	3	1	1	2	4	11
180	1357352	0	0	1	30.356	0.919	28	32	26	18	26	22	32	2	1	1	2	3	9
181	1365128	0	0	0	33.19	0.99	26	20	24	18	22	20	26	1	1	1	2	2	7
182	1365000	0	0	1	31.686	1.174	28	24	24	24	22	18	28	2	1	1	2	2	8
183	1317405	1	0	2	15.622	0.644	20	18	22	16	18	20	22	2	1	1	2	2	8
184	1355635	1	0	3	18.446	0.749	22	18	18	20	20	16	22	2	1	1	2	1	7
185	1355638	0	0	1	12.146	0.63	18	14	14	14	16	10	18	2	1	1	2	3	9
186	659199	1	0	4	15.8	0.5924	20	18	10	10	8	8	20	1	1	1	1	2	6
187	1363301	0	0	1	14.358	0.737	24	24	20	20	16	18	24	2	1	1	2	2	8
188	1368435	0	0	1	18.064	0.718	26	22	24	20	16	20	26	3	1	1	2	4	11
189	1357382	0	0	2	15.266	0.703	18	16	20	18	18	16	20	1	1	1	2	2	7
190	1360873	0	0	2	24.438	0.768	28	22	24	20	24	20	28	2	1	1	2	2	8
191	1369391	0	0	0	19.832	0.92	24	28	22	20	24	18	28	2	1	1	2	3	9
192	1369536	0	0	1	15.57	0.62	32	26	30	28	24	24	32	1	1	1	2	2	7
193	1369772	1	0	3	21.14	0.99	22	24	16	18	20	16	24	2	1	1	2	2	8
194	1368380	1	0	2	25.11	1.198	22	18	20	20	14	14	22	2	1	1	2	1	7
195	1364491	0	0	1	16.06	0.68	22	24	16	16	14	18	24	1	1	1	2	2	7
196	1369418	0	0	0	18.014	0.886	20	24	18	18	16	16	24	4	1	1	2	3	11
197	1369380	0	0	1	22.55	0.818	20	20	18	16	14	16	20	2	1	1	2	2	8
198	1376738	0	0	1	25.48	0.826	22	18	18	20	16	18	22	3	1	1	2	3	10
199	1374497	0	0	0	28.086	1.29	28	26	30	24	24	28	30	3	1	1	2	4	11
200	1370917	1	0	2	31.48	0.99	32	28	24	22	28	28	32	1	1	1	2	2	7

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The Principal,
DMC, Ludhiana.

Subject: Approval of Plan of Thesis.

This is to inform you that the Faculty of Medical Sciences in its meeting held on 29.10.2021 has approved the plan of thesis of **Ankur Goyal**, a student of your college for **MD General Medicine** along with the names of Supervisor/Co-Supervisor as under:-

Topic Plan of Thesis
Pattern and clinical correlation of sarcopenia in patients with fatty liver.

Supervisor
Dr. Vandana Midha
Prof.,
Dept. of Medicine,
DMCH, Ludhiana.

Co-Supervisor

Dr. Parminder Singh
Prof. & Head,
Dept. of Endocrinology,
DMCH, Ludhiana.

The student has to submit the four copies of thesis (along with PDF format) , to the Controller of Examinations, BFUHS, Faridkot, at least six months before the commencement of theory examination, if he/she is otherwise eligible to take the examination. He /She must directed to attach a photocopy of this letter with the forwarding letter while submitting thesis to the University along with the letter of approval of University for change of supervisor/Co-Supervisor, change of topic,(if any).

Dr. S P Singh MS(Oph)
Controller of Examinations

Note :

39. *If any discrepancy found regarding topic of thesis or Supervisor/Co-Supervisor, inform undersigned within one month after issue of this letter.*
40. *The student may submit the thesis as per the schedule already conveyed i.e for May/June examination 30th Nov of the preceding the year of examination and for Nov/Dec examinations 31st May of the year of examination.*

PATTERN AND CLINICAL CORRELATION OF SARCOPENIA IN PATIENTS WITH FATTY LIVER

THESIS PROPOSAL

FOR APPROVAL OF SUBJECT OF THESIS TO BE SUBMITTED

IN PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MD

GENERAL MEDICINE

OF THE

BABA FARID UNIVERSITY OF HEALTH SCIENCES

FARIDKOT

March 2021 **DR. ANKUR GOYAL**

DEPARTMENT OF GENERAL MEDICINE
DAYANAND MEDICAL COLLEGE AND HOSPITAL
LUDHIANA

ABSTRACT OF PLAN OF THESIS

Title	PATTERN AND CLINICAL CORRELATION OF SARCOPENIA IN PATIENTS WITH FATTY LIVER
For the degree of	MEDICINE
Name of the candidate	Dr. Ankur Goyal
Supervisor	Dr Vandana Midha, Professor, Department of Medicine, DMC&H Ludhiana
Co-supervisor	Dr Parminder Singh, Professor & Head, Department of Endocrionology, DMC&H Ludhiana
Institution	Dayanand Medical College & Hospital, Ludhiana
University	Baba Farid University of Health Sciences, Faridkot

Introduction: Sarcopenia refers to the syndrome of progressive, generalized loss of skeletal muscle mass, strength and function, which in turn is associated with an increased risk of adverse outcomes, such as physical disability, poor quality of life and increased mortality. Sarcopenia and hepatic steatosis share similar pathological mediators, such as chronic inflammation, insulin resistance and physical inactivity. There is a scarcity of data and research in North India pertaining to prevalence of sarcopenia in patients with fatty liver, so in the present study we aim to determine the prevalence and clinical correlation of sarcopenia in fatty liver patients.

Aim of Study: 1. To determine the pattern of sarcopenia in patients with fatty liver. 2. To determine the clinical correlation between sarcopenia and patients with fatty liver.

Materials & Methods: A total of 200 patients with fatty liver under Department of Medicine and Endocrinology at DMCH Ludhiana will be approached for the study. The purpose of the study will be explained to the participants and also that their participation will be entirely voluntary. An informed consent will be obtained from the willing participants. A structured pre-designed proforma will be used for this study which will be including the demographic data, past history, personal history, fatty liver assessment and sarcopenia assessment including muscle mass, strength and function assessment

Clinical Significance: The demonstration of association between sarcopenia and hepatic steatosis may provide opportunity to prevent deterioration of patients with fatty liver.

Keywords: Fatty Liver, Sarcopenia, Skeletal muscle mass, strength and performance

(Signature) Candidate	(Signature) Co-supervisor	(Signature) Supervisor	(Signature) Principal

CERTIFICATE OF FACILITIES AVAILABLE

This is to certify that the facilities for work on the subject of thesis titled **"PATTERN AND CLINICAL CORRELATION OF SARCOPENIA IN PATIENTS WITH FATTY LIVER"** exist in the Department of General Surgery, DMC&H, Ludhiana and will be provided to be candidate. We will see that the data being included in the thesis are genuine and is collected by the candidate himself under our supervision and guidance.

Supervisor

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Date: 15/02/2021

APPROVAL PROFORMA
BY RESEARCH & ETHICAL COMMITTEE
DAYANAND MEDICAL COLLEGE & HOSPITAL, LUDHIANA

Name of candidate	Dr. Ankur Goyal
Department	Medicine
Topic of Thesis	PATTERN AND CLINICAL CORRELATION OF SARCOPENIA IN PATIENTS WITH FATTY LIVER
Likely date of appearing in PG examination	MAY 2023
Date of enrollment	30th June 2020
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Approved: Yes / No

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BABA FARID UNIVERSITY OF HEALTH SCIENCES, FARIDKOT

PROFORMA FOR REGISTRATION OF SUBJECT FOR DISSERTATION

1	NAME OF THE CANDIDATE AND ADDRESS	DR. ANKUR GOYAL AMRIT NURSING HOME, WATER WORKS ROAD, MANSA, PUNJAB
2	NAME OF THE INSTITUTE	DAYANAND MEDICAL COLLEGE AND HOSPITAL, LUDHIANA
3	COURSE OF STUDY AND SUBJECT	M.D. MEDICINE
4	DATE OF ADMISSION OF COURSE	30TH JUNE 2020
5	TITLE OF THE TOPIC	PATTERN AND CLINICAL CORRELATION OF SARCOPENIA IN PATIENTS WITH FATTY LIVER

6. BRIEF RESUME OF THE INTENDED WORK

6.1 NEED FOR THE STUDY

Fatty liver, also known as hepatic steatosis is the abnormal accumulation of triglycerides in the parenchymal cells of liver. It occurs when hepatic mechanisms for triglyceride synthesis (e.g. lipid uptake and de novo lipogenesis) overwhelm the mechanisms for triglyceride disposal (e.g. degradative metabolism and lipoprotein export). Triglycerides itself are not hepatotoxic but its precursors i.e. fatty acids and diacylglycerols and metabolic products e.g. reactive oxygen species can damage hepatocytes causing the lipotoxicity. This further leads to generation of inflammatory cytokines and hormonal mediators that disturb the hepatocyte metabolism. The net result is hepatocytes death.

Fatty liver can be caused by multiple causes but the common causes are alcoholic liver disease (ALD) and non alcoholic fatty liver disease (NAFLD).

Liver function test and multiple hepatic indices are used for predicting the functional status of liver. Ultrasound is the most commonly used radiological modality for fatty liver diagnosis and grading.

Sarcopenia refers to the syndrome of progressive, generalized loss of skeletal muscle mass, strength and function, which in turn is associated with an increased risk of adverse outcomes, such as physical disability, poor quality of life and increased mortality.[1]

European Working Group on Sarcopenia in Older People (EWGSOP) suggested its staging:

- Pre-sarcopenia- decreased muscle mass but have no impact on muscle strength or performance
- Sarcopenia- decreased muscle mass with decreased muscle strength or performance
- Severe sarcopenia- decreased muscle mass with decreased muscle strength and performance[2]

Sarcopenia assessment is done by initial screening tool of SARC-F score, skeletal muscle mass using appendicular skeletal muscle mass (ASM) and skeletal muscle index (SMI), skeletal muscle strength by measuring hand grip strength using dynamometer and skeletal muscle performance by Short physical performance battery (SPPB) test.

Sarcopenia and hepatic steatosis share similar pathological mediators, such as chronic inflammation, insulin resistance and physical inactivity. Both skeletal muscle and adipose tissue are primary target tissues of insulin, in which insulin plays a key role in protein anabolism and lipogenesis. In an insulin resistant state, a known risk factor of both NAFLD and sarcopenia, there occurs a reduction in protein synthesis and an increase in protein catabolism in the myocytes resulting in muscle mass loss. Insulin resistance in adipose tissue drives lipolysis, free fatty acid release and promotes a pro-inflammatory environment known as lipotoxicity. Further, lipotoxicity drives excess lipid accumulation in both the liver and the muscle, and can inhibit key hormone pathways involved in muscle regeneration.

There is a scarcity of data and research in North India pertaining to pattern of sarcopenia in patients with fatty liver, so in the present study we aim to determine the pattern and clinical correlation of sarcopenia in fatty liver patients.

6.2 REVIEW OF LITERATURE

FATTY LIVER

Fatty liver is the abnormal accumulation of excessive fat in the hepatic parenchymal cells which is the common pathological feature underlying the two most common and emerging causes of chronic liver disease, alcoholic liver disease (ALD) and non-alcoholic fatty liver disease (NAFLD). The burden of both ALD and NAFLD are increasing worldwide.[3,4]

Other causes of fatty liver include hepatitis C (particularly genotype 3), certain medications (cytotoxic drugs, amiodarone, glucocorticoids, HAART therapy, etc), inflammatory bowel disease, inborn errors of metabolism (like wilson disease, glycogen storage disease, etc) and acute fatty liver of pregnancy.

HEPATIC INDICES

Though percutaneous liver biopsy remains gold standard for diagnosis of hepatic steatosis, but due to drawbacks like risk of complications, costs and sampling errors, non invasive hepatic markers and ultrasonography are more frequently utilized.

Hepatic steatosis index (HSI) is a simple, efficient screening tool for fatty liver assessment that may be utilized for selecting patients for ultrasonography developed by Lee JH, Kim D, et al.[5]

HSI= 8 x ALT/AST + BMI (+2 if diabetes mellitus, +2 if female)

The recommended cut off of HSI for hepatic steatosis is more than or equal to 36.[5] HIS can rule out NAFLD with a sensitivity of 93.1% and detected NAFLD with a specificity of 92.4%.

APRI Score (Aspartate aminotransferase to platelet ratio index) is a simple and efficient tool for liver dysfunction especially fibrosis [6]

$$\text{APRI score} = \frac{\text{Aspartate aminotransferase (in IU/litre)}}{\text{AST upper limit of normal value (in IU/litre)} \times \text{Platelet count (in } 10^9\text{/litre)}}$$

In a study conducted by Lin ZH, Xin YN, et al, it was found that for significant fibrosis, an APRI threshold of 0.7 was 77% sensitive and 72% specific. For severe fibrosis, a threshold of 1.0 was 61% sensitive

and 64% specific. For cirrhosis, a threshold of 1.0 was 76% sensitive and 72% specific. [7]

FIB-4 score is a simple tool to used to estimate liver fibrosis [8]

$$\text{FIB-4 Score} = \frac{\text{Age X AST}}{\text{Platelet count X } \sqrt{\text{ALT}}}$$

FIB-4 score	Approximate fibrosis stage[8]
<1.45	0-1
1.45-3.25	2-3
>3.25	4-6

BARD score: In a study conducted by Harrison SA, Oliver D, et al, three variables were combined (BMI, AST to ALT ratio, DM) to form an easily calculated composite score for predicting advanced fibrosis called the BARD score.[9]

Variable		Points
BMI ≥ 28	No	0
	Yes	1
AST to ALT ratio ≥0.8	No	0
	Yes	2
Diabetes	No	0
	Yes	1

BARD score	Risk of advanced fibrosis
0-1	Low
2-4	High

NAFLD score can be used to predict which patients are likely to have cellular evidence of fibrosis on biopsy

NAFLD score = -1.675 + [0.037 x age (years)] + [0.094 x BMI (kg/m^2)] + [1.13 x diabetes (yes=1, no=0)] + [0.99 x AST/ALT ratio] – [0.013 x platelet count(x10 ^{9}/litre)] – [0.66 x albumin (g/dl)] [10]

NAFLD score	Fibrosis Severity
<-1.455	F0-F2
-1.455 – 0.675	Indeterminate score
>0.675	F3-F4

ULTRASONOGRAPHY- Ultrasound is the most commonly used modality for fatty liver diagnosis and grading. The normal liver parenchyma has a homogeneous echotexture and echogenicity equal to that of the renal cortex and spleen. The liver shows echogenicity higher than the renal cortex and spleen due to fatty infiltration. Grading of steatosis is done based on analysis of the intensity of the echogenicity. [11]

- Grade I: diffusely increased hepatic echogenicity but periportal and diaphragmatic echogenicity is still appreciable
- Grade II: diffusely increased hepatic echogenicity obscuring periportal echogenicity but diaphragmatic echogenicity is still appreciable
- Grade III: diffusely increased hepatic echogenicity obscuring periportal as well as diaphragmatic echogenicity[11]

SARCOPENIA

Sarcopenia was primarily considered an aging disorder but now is considered a multifactorial disorder including changes in hormones, immobility, nutrition and other neurodegenerative changes. The worldwide estimate of prevalence of sarcopenia was found to be 10% in men and 10% in women, respectively and the prevalence was higher among non- Asian than Asian individuals in both genders.[12] The prevelance of sarcopenia in Indian population was found to be 17.5%.[13]

The original diagnosis of sarcopenia began with low muscle mass detection. This concept was changed since muscle strength and performance in combination to muscle mass is a better predictor of adverse outcomes than muscle mass alone. It was also demonstrated that dual energy X-ray absorptiometry could be considered as a reference standard (but not a gold standard) for measuring muscle lean body mass.[14]

A good screening tool for sarcopenia is SARF-C score

SARC F scoring system		
Component	**Question**	**Scoring**
Strength	How much difficulty do you have in lifting and carrying 10 pounds (4.5kg)?	None 0 Some 1 A lot or unable 2
Assistance in walking	How much difficulty do you have walking across a room?	None 0 Some 1 A lot, use aids, or unable 2
Rise from a chair	How much difficulty do you have transferring from a chair or bed?	None 0 Some 1 A lot or unable without help 2
Climb stairs	How much difficulty do you have climbing a flight of 10 stairs?	None 0 Some 1 A lot or unable 2
Falls	How many times have you fallen in the past year?	None 0 1-3 falls 1 4 or more falls 2

A score of equal to or more than four have higher risk of having sarcopenia[15]

SKELETAL MUSCLE MASS - Skeletal Muscle Mass (SMM) is calculated as the appendicular skeletal muscle mass (ASM) based on the equation proposed by Lee et al.[16]:

ASM= (0.244 × weight) + (7.8 × height) + (6.6 × sex) – (0.098 × age) + (race-3.3)

[Where female = 0 and male = 1; race = 0 (White and Hispanic), race = 1.9 (Black), and race = -1.6 (Asian)].

ASM was further divided by BMI to create a Skeletal Muscle Mass Index (SMI). The recommended cut-off points for SMI are <0.789 for men and <0.512 for women.[17]

SKELETAL MUSCLE STRENGTH- Skeletal muscle strength is assessed by hand grip strength which is assessed by dynamometer.

The recommended cut-off points for weakness are grip strength <26kg for men and <16kg for women.[17]

SKELETAL MUSCLE FUNCTION- Skeletal muscle function is assessed by short physical performance battery test (SPPB), which involves objective assessment of 3 parameters:[18]

1. Repeated chair stands
2. Balance test
3. 8 feet walk test

A cut-point of ≤8 in the SPPB showed high sensitivity for diagnosis of sarcopenia[19]

SARCOPENIA IN PATIENTS WITH FATTY LIVER

Sarcopenia and hepatic steatosis share similar pathological mediators, such as chronic inflammation, insulin resistance and physical inactivity. Multiple studies have been conducted to study the pattern and correlation of sarcopenia in patient with fatty liver.

The earliest evidence of a link between sarcopenia and NAFLD came from the Korean Sarcopenic Obesity Study. This population based study of 452 presumed healthy individuals found a higher risk of NAFLD (diagnosed on CT) in individuals with lower skeletal muscle mass compared to the control group. The subjects in the sarcopenia group had greater body mass index (BMI), waist circumference, and total body fat mass (percentage) as well as higher systolic blood pressure (SBP) and worse lipid profiles compared with the normal group.[20]

ChoeEY et al demonstrated that a simple assessment of sarcopenic obesity i.e. waist-to-calf circumference ratio (WCR) is associated with increased risk for NAFLD in type 2 diabetes mellitus patients. NAFLD prevalence was higher with increasing WCR tertiles: lowest tertile (36% in men, 28% in women) versus highest tertile (53.8% in men, 58.2% in women).[21]

Low muscle strength was significantly associated with NAFLD and advanced fibrosis was demonstrated by Kang S et al using KNHANES database. 14861 individuals, 20 to 79 years of age, from the Korean National Health and Nutrition Examination Surveys (KNHANES) from

2014 to 2016 were selected. Muscle strength was quantified as the handgrip strength divided by the body mass index (BMI). Low muscle strength was associated with an increased prevalence of NAFLD, which remained significant even after adjustment for age, sex, obesity, insulin resistance, diabetes, hypertension, dyslipidaemia, and high-sensitivity C-reactive protein. The prevalence of NAFLD decreased by 24% with each quartile increment in muscle strength.[22]

A retrospective longitudinal study in Korea demonstrated a cause-effect relation between sarcopenia and NAFLD. This study shows an association between baseline skeletal muscle mass and incidence or resolution of NAFLD and a potential beneficial effect of increasing muscular mass.[23]

It have been demonstrated that progressive increase in fat mass and a loss of ASM was significantly associated with incident NAFLD in a retrospective cohort study involving 4,398 initially NAFLD-free subjects who underwent routine health examinations during 2004 to 2005 and returned for a follow-up during 2014 to 2015. At the 10-year follow-up, 591 out of 4,398 participants (13.4%) had developed NAFLD. However, decreased ASM was significantly associated with incident NAFLD in non obese but not in obese subjects.[24]

Sarcopenia is associated with significant liver fibrosis in subjects with NAFLD, and the association is independent of obesity and insulin resistance was shown by Yong-ho Lee, Seung Up Kim et al.[25]

A study showed a stepwise significant decrease in total psoas area at level of L4 vertebra on CT scan from the control group to NASH group to cirrhosis group. This difference remained significant after adjusting for age, gender, and height. Similar findings were noted for the paraspinal muscle area.[26]

It was demonstrated by Merli M that both non obese and obese subjects showed a significantly increased prevalence of NAFLD when sarcopenia was present. They also demonstrated that in obese individuals, gain of muscle mass by regular exercise was associated with reduced probability of NAFLD.[27]

6.3 AIMS AND OBJECTIVES OF THE STUDY

- To determine the pattern of sarcopenia in patients with fatty liver.
- To determine the clinical correlation between sarcopenia and patients with fatty liver.

7.0 MATERIALS AND METHODS

7.1 SOURCE OF DATA

A total of 200 patients with fatty liver under the Department of Medicine and Endocrinology at DMCH Ludhiana will be approached for the study. The purpose of the study will be explained to the participants and they will be explained clearly that their participation is entirely voluntary. An informed consent will be obtained from the willing participants.

A structured pre-designed Performa will be used for this study. Performa will be divided in 6 sections.

PART 1: This will include basic demographic data including name, age, sex, occupation and address.

PART 2: This will include the history of present illness, the past history of the patient including any chronic illness like diabetes mellitus, hypertension, bronchial asthma, tuberculosis or any other illness. This will also include treatment history of the patient.

PART 3: This will include personal history including the history of alcohol intake with its quantity and duration. It would also include history of smoking and dietary pattern.

PART 4: This will include the general physical examination and systemic physical examination. This will also include the nutritional assessment of the patient including the anthropometric measurements

PART 5: This will include the basic investigation of the patient including hemogram, liver function test, renal function test, lipid profile, diabetic status and viral markers of the patient. The hepatic indices will be calculated. It will also include the ultrasonography report with grade of fatty liver. Patients with cirrhosis and decompensated liver disease would be excluded from the study. If the patient has undergone fibroscan due to any indication, the patient with fibroscan showing fibrosis will be excluded from the study.

PART 6: This will include the sarcopenia assessment including SARC-F scoring, muscle mass, muscle strength and muscle performance.

MUSCLE MASS- For muscle mass assessment, MRI is considered gold standard. But doing MRI is costly and cumbersome, so Skeletal Mass Index is calculated as:

$$\text{Skeletal Mass Index} = \frac{\text{Appendicular Skeletal Mass index (ASM)}}{\text{Body Mass Index}}$$

$$\text{Appendicular Skeletal Mass Index} = (0.244 \times \text{weight}) + (7.8 \times \text{height}) + (6.6 \times \text{sex}) - (0.098 \times \text{age}) + (\text{race} - 3.3)$$

[where female = 0 and male = 1; race = 0 (White and Hispanic), race = 1.9 (Black), and race =1.6 (Asian)]. [16]:

The recommended cut-off points for SMI are <0.789 for men and <0.512 for women.[17]

SKELETAL MUSCLE STRENGTH- This will be assessed by hand grip strength using a dynamometer. Patient will be asked to sit in a chair with forearms resting on the arms of a chair and feet flat on the floor. Patient will be demonstrated the use of dynamometer. Six squeeze readings, three with each hand and each squeeze lasting for 3-5 seconds will be noted and the highest reading is taken as final result. The recommended cut-off points for low muscle strength are grip strength <26kg for men and <16kg for women.[17]

SKELETAL MUSCLE PERFORMANCE/ FUNCTION- This will be assessed using Short physical performance battery (SPPB) test. It is group of measures that combines the results of gait speed, chair stand and balance tests. The scores range from 0 to 12

- Repeated chair stands- patient will be asked to repeatedly stand up and sit down as quickly as possible 5 times without stopping with arms being kept across chest. The total time taken by the patient will be recorded by a stopwatch.

  The test will be paused if patient start using his/ her arms or if it is taking more than 1 minute to complete the test or patient develops respiratory distress.
- Balance test- Patient will be asked to stand unsupported for 10 seconds with feet in specific positions- feet together, semi tandem(heel of one foot placed by the big toe of the other foot)

and full tandem(feet directly in front of each other. Patient will be allowed to use arms, bend the knees or move body to maintain balance

- 8 feet walk test- Patient will be asked to walk at his/her usual pace between to marked points 8 feet away. Time taken by the patient to cover the distance will be recorded.

Parameters		Score
Repeated chair stands	Unable to complete 5 chair stands	0
	>16.7 seconds	1
	13.7- 16.6 seconds	2
	11.2- 13.6 seconds	3
	<11.2	4
Balance	Side to side stand <10 seconds	0
	>10 seconds	1
	Semi tandem stand <10 seconds	0
	>10 seconds	1
	Tandem stand > or = 10 seconds	2
	3.00- 9.99 seconds	1
	<3.00 seconds	0
8 feet walk test	Unable to walk	0
	>8.70 seconds	1
	6.21- 8.70 seconds	2
	4.82- 6.20 seconds	3
	<4.82 seconds	4

A cut-point of ≤8 in the SPPB showed high sensitivity for diagnosis of sarcopenia[19]

7.2 METHOD OF COLLECTION OF DATA

Inclusion Criterion:

1. Patients diagnosed with fatty liver disease on ultrasonography
2. Patients with Hepatic Steatosis Index more than or equal to 36

Exclusion Criterion:

1. Ultrasound showing cirrhosis or decompensated liver disease
2. Patients with Hepatic Steatosis Index less than 36
3. APRI score >1
4. FIB-4 score >1.45
5. BARD score >2
6. NAFLD score >0.675
7. Fibroscan showing fibrosis
8. Pregnant females
9. Patient taking drugs causing fatty liver like steroids, methotrexate, tamoxifen, amiodarone and valproic acid
10. Diagnosed case of muscle and neurological disorders leading to muscle wasting
11. Patient not willing to give consent.

No of Patients: 200 patients

Outcome:

Analyzing the sarcopenia assessment i.e. muscle mass, function and performance and their pattern and clinical correlation in patients with fatty liver

Statistical Analysis:

Data will be described in terms of range; mean+ standard deviation (+ SD), median, frequencies(percentages) as appropriate. All statistical calculations will be done using (Statistical Package for the Social Science) SPSS 21version (SPSS Inc., Chicago, IL, USA) statistical program for Microsoft Windows.

7.3 DOES THE STUDY REQUIRE ANY INVESTIGATIONS OR INTERVENTIONS TO BE CONDUCTED ON PATIENTS OR OTHER HUMANS OR ANIMALS? IF SO, PLEASE DESCRIBE BRIEFLY.

No.

7.4 HAS ETHICAL CLEARANCE BEEN OBTAINED FROM YOUR INSTITUTION IN CASE OF 7.3?

Yes

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PROFORMA

Sr. No.

DEMOGRAPHIC DATA

Name Age Sex

Occupation

Address

MRD No

HISTORY OF PRESENT ILLNESS

Fatique, weakness, lethargy, yellowish discoloration of eyes or skin, oedema, other stigmata of liver disease, loose stool, constipation

Any other symptom-

PAST HISTORY

Diabetes Mellitus, Hypertension, Bronchial Asthma, Tuberculosis,

Any other co-morbidity-

TREATMENT HISTORY

PERSONAL HISTORY

Alcohol	yes/no	If yes, Quantity
		Duration
Smoking	yes/no	If yes, Quantity
		Duration

Dietary Pattern

Vegan/ Lacto-ovo-vegetarian/ Pesco-vegetarian/ Semi vegetarian/ Non vegetarian

Signature of Candidate **Signature of Supervisor**

CLINICAL EXAMINATION:

GENERAL PHYSICAL EXAMINATION

Vitals-	HR	RR	SpO_2
	BP	Temperature	
	Pallor	Edema	Jaundice
	JVP	Cyanosis	Lymphadenopathy

NUTRITIONAL ASSESSMENT

Body weight (kg)

Height (m)

Body mass index (kg/m^2)

Waist circumference (cm)

Hip circumference (cm)

Mid arm circumference (cm)

Subcutaneous fat stores: (good/ fair/ poor)

Under the eyes

Biceps

Triceps

Muscle wasting: (absent/ moderate/poor)

Temple	Quadriceps
Clavicle	Calf
Shoulder	Knee

Signature of Candidate **Signature of Supervisor**

SYSTEMIC PHYSICAL EXAMINATION

CENTRAL NERVOUS SYSTEM

CARDIOVASCULAR SYSTEM S1 S2

Any other added sounds

RESPIRATORY SYSTEM Character of breath sound

Any added sounds

PER ABDOMEN **Inspection** Shape of abdomen

Skin

Any venous prominence

Visible peristalsis

Hernia sites

Palpation **Superficial** Temperature

Tenderness

Deep Any localised lump

Organomegaly

Liver Size

Consistency

Margin

Tenderness

Percussion General note of abdomen

Upper border of liver

Shifting dullness

Auscultation Bowel sounds

Venous hum/ bruit

Signature of Candidate **Signature of Supervisor**

INVESTIGATIONS

Liver Function Test:	Bilirubin(total)	Total Proteins
	Bilirubin(direct)	Albumin
	AST	PT/INR
	ALT	
	ALP	
Lipid Profile:	Triglycerides	HDL Cholesterol
	Cholesterol	LDL Cholesterol
Hemogram:	Total leucocyte count	
	Differential leucocyte count	
	(Neutrophil/Lymphocyte/Monocyte/Eosinophil/Basophil)	
	Haemoglobin	
	MCV	
	Platelet count	
Renal Function Test:	Urea	Serum Na^+
	Serum Creatinine	Serum K^+
		Serum Cl^-
Diabetic Status:	Fasting blood sugar	HbA1c
	Random blood sugar	
Viral Markers (Rapid)	HBsAg	
	Anti- HCV	
	Anti-HIV	

Any other specific investigation:

Signature of Candidate **Signature of Supervisor**

- **HEPATIC INDICES:**

  Hepatic Steatosis Index (HSI)

  AST to Platelet Ratio Index (APRI)

  FIB-4 score

  BARD score

  NAFLD score

ULTRASONOGRAPHY (along with grade of fatty liver)-

FIBROSCAN (if done)

SARCOPENIA ASSESSMENT

SARC F scoring system		
Component	**Question**	**Score**
Strength	How much difficulty do you have in lifting and carrying 10 pounds (4.5kg)?	
Assistance in walking	How much difficulty do you have walking across a room?	
Rise from a chair	How much difficulty do you have transferring from a chair or bed?	
Climb stairs	How much difficulty do you have climbing a flight of 10 stairs?	
Falls	How many times have you fallen in the past year?	

Signature of Candidate **Signature of Supervisor**

Appendicular skeletal muscle mass (ASM)

Skeletal muscle index (SMI)

Hand grip strength measured by dynamometer- 6 readings

Right Hand	Left Hand

Maximum reading -

Short physical performance battery (SPPB) test

- Repeated Chair Stands
- Balance Test – Feet together
  Semi tandem position
  Tandem position
- 8 feet walk test

Total SPPB test score-

Signature of Candidate **Signature of Supervisor**

INFORMED PATIENT CONSENT

Date: _____

I.....D/o, W/o, S/o.....
.....am willing to participate in the study. I am ready to participate in this study on my own **"PATTERN AND CLINICAL CORRELATION OF SARCOPENIA IN PATIENTS WITH FATTY LIVER"** I affirm that I have not been given any financial incentive and no pressure has been put on me to give the consent. The purpose of this research has been explained to me and I believe that it is for the benefit of science and mankind. I have been explained about the risk in this research and I understand that the risk is very minimal. I have been explained the method of participating in this research work.

I can choose to opt out of this research at any time and my opting out will not have any effect on my treatment.

.....
Signature of the Witness

Name:

.....
Signature of the patient

Signature of Candidate

Signature of Supervisor

मरीज अनुमति फार्म

तिथि _____

मैं _____ पत्नी/पुत्र/पुत्री _____

निवासी _____

इस शोधकार्य "PATTERN AND CLINICAL CORRELATION OF SARCOPENIA IN PATIENTS WITH FATTY LIVER" में भाग लेने के लिए सहमत हूँ। मैं इस शोधकार्य में भाग लेने के लिए अपनी स्वेच्छा से तैयार हूँ। मैं पुष्टि करता/करती हूँ की यह स्वीकृति देने के लिए मुझे कोई आर्थिक प्रलोभन नहीं दिया गया और न ही दबाव डाला गया है। मुझे इस शोधकार्य का उद्देश्य स्पष्ट कर दिया गया है और मुझे यह विश्वास है की यह विज्ञान और मानवता के लाभ के लिए है। मुझे इस शोधकार्य में होने वाले जोखिम के बारे में समझा दिया गया है और मेरी समझ में यह जोखिम बहुत मामुली है।

मैं इस शोधकार्य में भाग लेने के सम्बन्ध में किसी भी समय अपनी अस्वीकृति व्यक्त कर सकता/सकती हूँ और मेरे अस्वीकृति व्यक्त करने का मेरे इलाज पर कोई प्रभाव नहीं पड़ेगा।

_____ _____

गवाह के हस्ताक्षर रोगी के हस्ताक्षर/अंगूठे का निशान

नाम: नाम:

_____

अन्वेषक के हस्ताक्षर

_____

विद्यार्थी के हस्ताक्षर

ਮਰੀਜ਼ ਰਜ਼ਾਮੰਦੀ ਫਾਰਮ

ਮਿਤੀ_____

ਮੈ_____ਪਤਨੀ/ਪੁੱਤਰ/ਪੁੱਤਰੀ_____

ਵਾਸੀ _____

"PATTERN AND CLINICAL CORRELATION OF SARCOPENIA IN PATIENTS WITH FATTY LIVER" ਤੇ ਚਲ ਰਹੀ ਖੋਜ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਲਈ ਰਜ਼ਾਮੰਦ ਹਾਂ। ਇਸ ਖੋਜ ਕੰਮ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਲਈ ਮੈ ਆਪਣੀ ਮਰਜ਼ੀ ਨਾਲ ਤਿਆਰ ਹਾਂ। ਮੈ ਇਹ ਦਸਣਾ ਚਾਹੁੰਦਾ ਹਾਂ/ ਚਾਹੁੰਦੀ ਹਾਂ ਕੇ ਇਹ ਰਜ਼ਾਮੰਦੀ ਦੇਣ ਵਾਸਤੇ ਮੈਨੂ ਕਿਸੇ ਵੀ ਤਰਾਂ ਦਾ ਲੋਭ-ਲਾਲਚ ਨਹੀ ਦਿੱਤਾ ਗਿਆ ਅਤੇ ਨਾ ਹੀ ਕੋਈ ਦਬਾ ਪਾਇਆ ਗਿਆ ਹੈ। ਮੈਨੂ ਇਸ ਖੋਜ ਦਾ ਮਨੋਰਥ ਸਮਝਾ ਦਿੱਤਾ ਗਿਆ ਹੈ ਅਤੇ ਮੈਨੂ ਇਹ ਤਰੇਸਾ ਦਵਾਇਆ ਗਿਆ ਹੈ ਕੇ ਇਹ ਖੋਜ ਵਿਗਿਆਨ ਅਤੇ ਮਾਨਵਤਾ ਦੀ ਭਲਾਈ ਲਈ ਹੈ। ਮੈਨੂ ਇਸ ਖੋਜ ਵਿਚ ਹੋਣ ਵਾਲੇ ਖਤਰੇ ਬਾਰੇ ਸਮਝਾ ਦਿੱਤਾ ਗਿਆ ਹੈ ਅਤੇ ਮੈਨੂ ਇਹ ਯਕੀਨ ਹੈ ਕੇ ਇਹ ਖਤਰਾ ਬਹੁਤ ਮਾਮੂਲੀ ਹੈ। ਮੈਨੂ ਇਸ ਖੋਜ ਕੰਮ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਦਾ ਢੰਗ – ਤਰੀਕਾ ਸਮਝਾ ਦਿੱਤਾ ਗਿਆ ਹੈ।

ਮੈ ਇਸ ਖੋਜ ਕੰਮ ਵਿਚ ਹਿੱਸਾ ਲੈਣ ਬਾਰੇ ਆਪਣੀ ਰਜ਼ਾਮੰਦੀ ਕਿਸੇ ਵੀ ਸਮੇ ਵਾਪਸ ਲੈ ਸਕਦਾ ਹਾਂ/ ਸਕਦੀ ਹਾਂ ਅਤੇ ਮੇਰੀ ਰਜ਼ਾਮੰਦੀ ਵਾਪਸ ਲੈਣ ਦਾ ਮੇਰੇ ਇਲਾਜ ਤੇ ਕੋਈ ਅਸਰ ਨਹੀ ਹੋਵੇਗਾ।

_____ _____

ਗਵਾਹ ਦੇ ਹਸਤਾਖਰ ਮਰੀਜ਼ ਦੇ ਹਸਤਾਖਰ

ਮਿਤੀ_____ ਮਿਤੀ_____

ਪਤਾ _____ ਪਤਾ _____

_____

ਨਿਰੀਖਕ ਦੇ ਹਸਤਾਖਰ

_____

ਸਿਖਿਆਰਥੀ ਦੇ ਹਸਤਾਖਰ